

# THE ARCHITECT & BUILDING NEWS

8 JUNE 1960

VOL. 217

NO. 23

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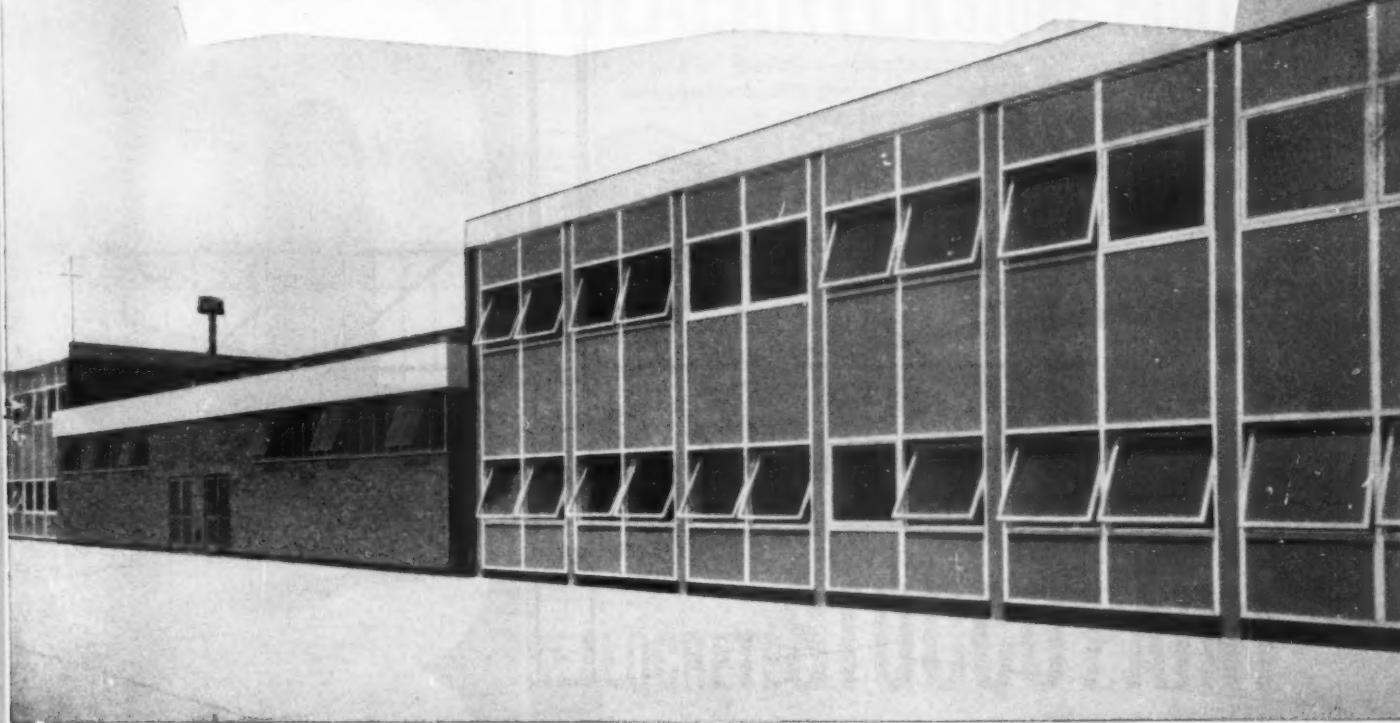
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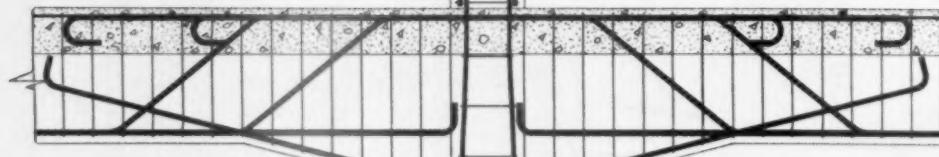
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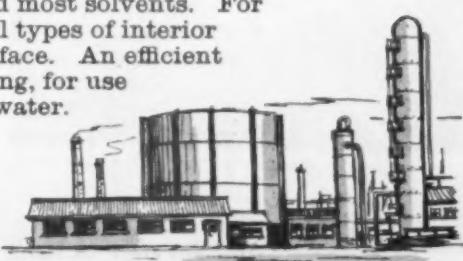
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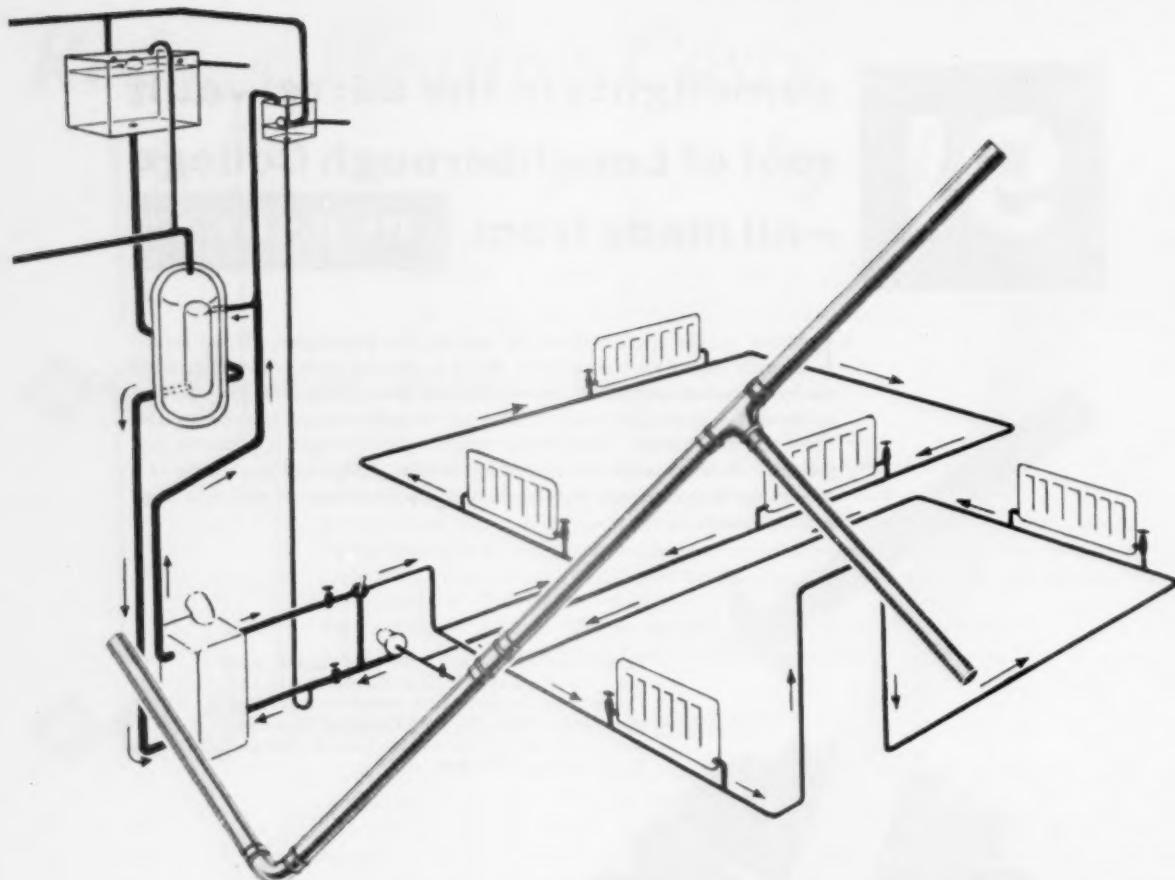


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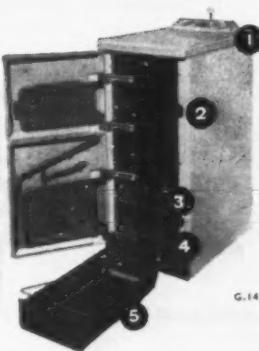
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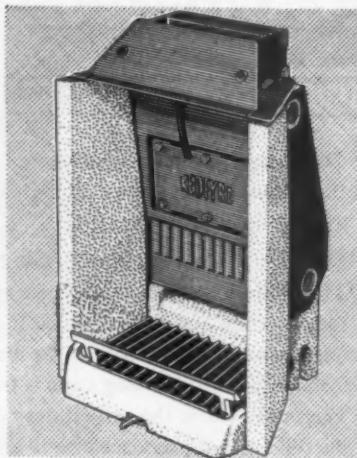
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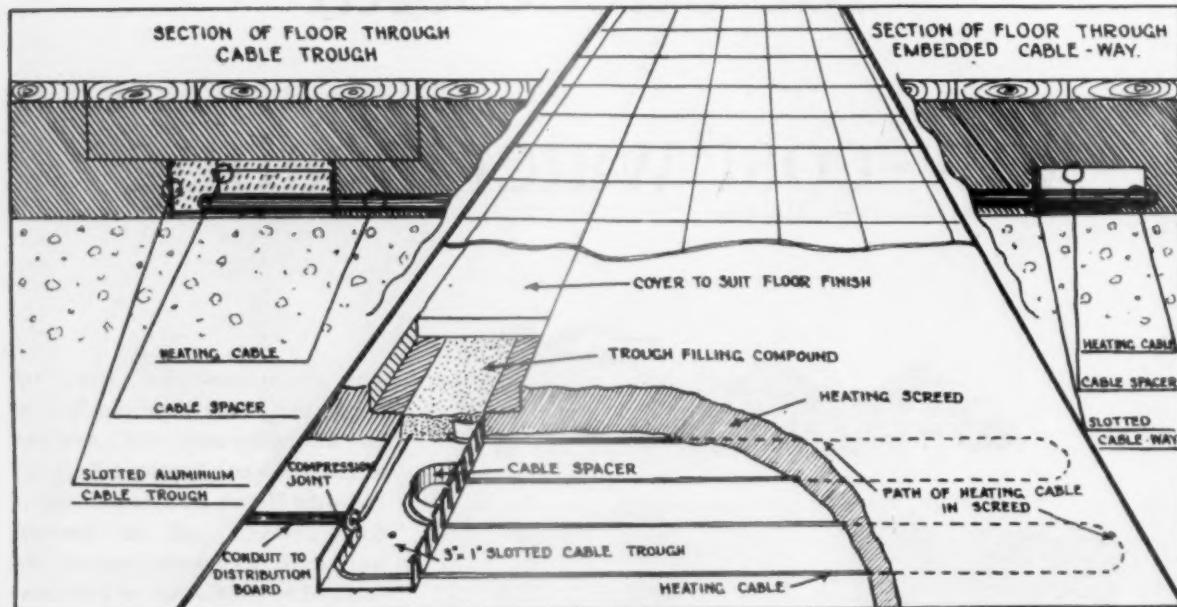


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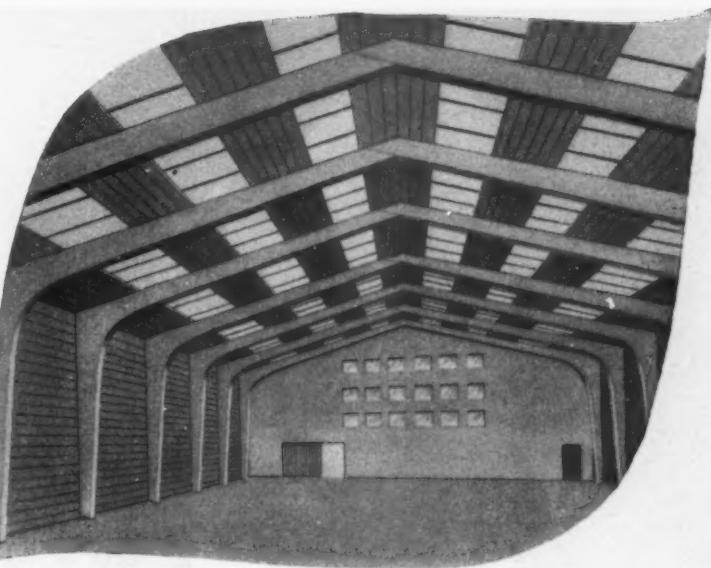
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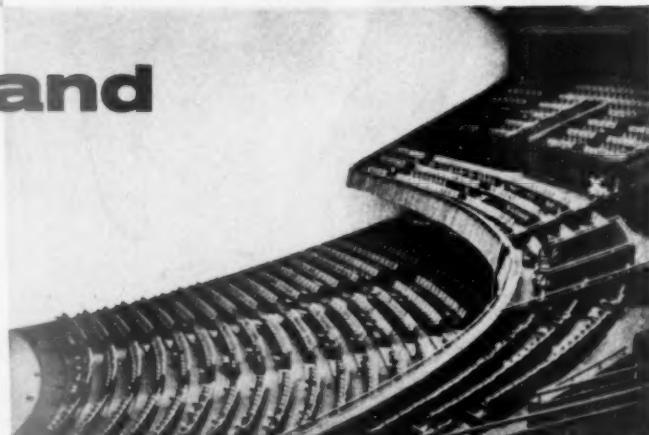


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 “I think it’s time you were in school, my lad.”

## Henry Boot



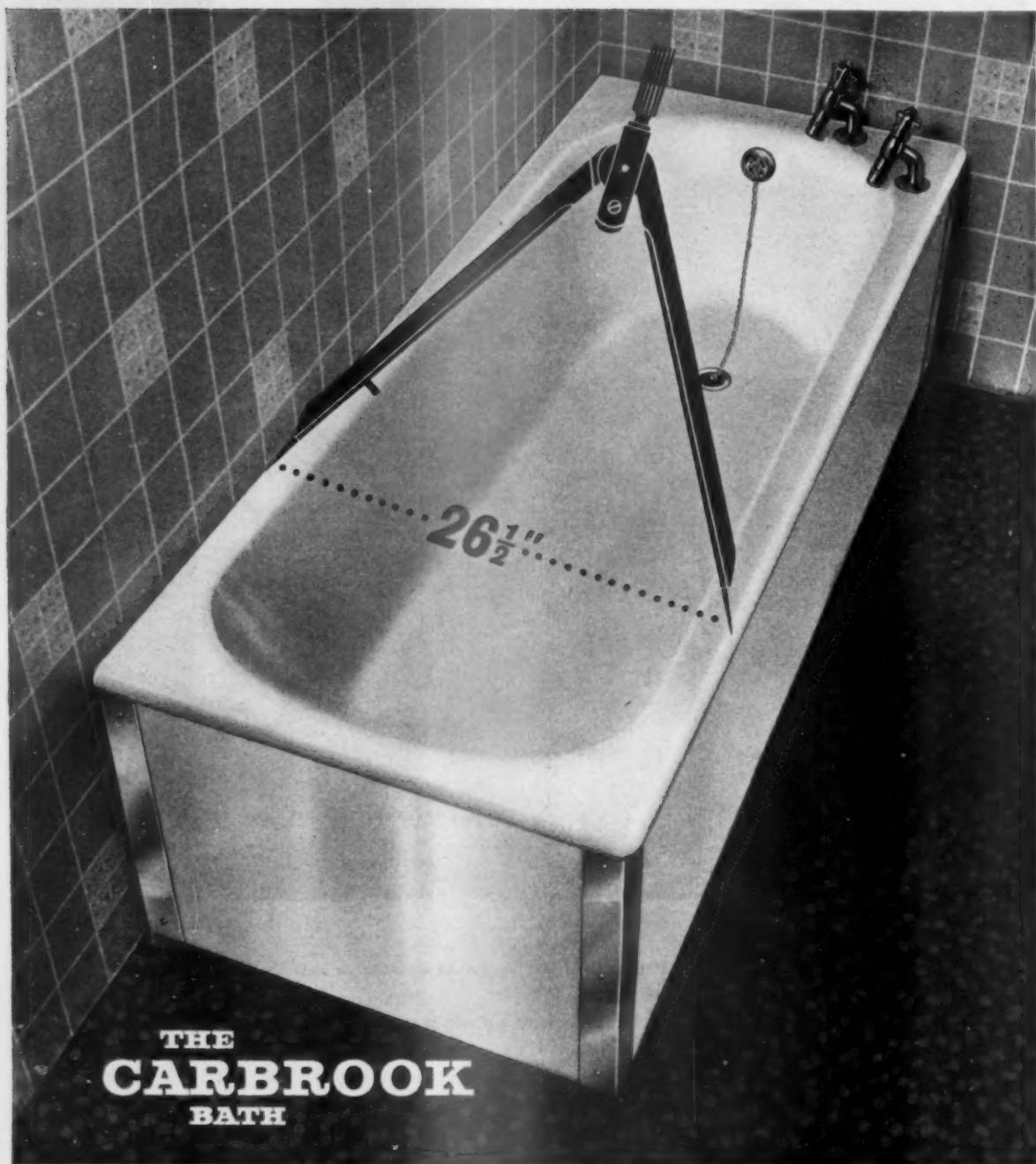
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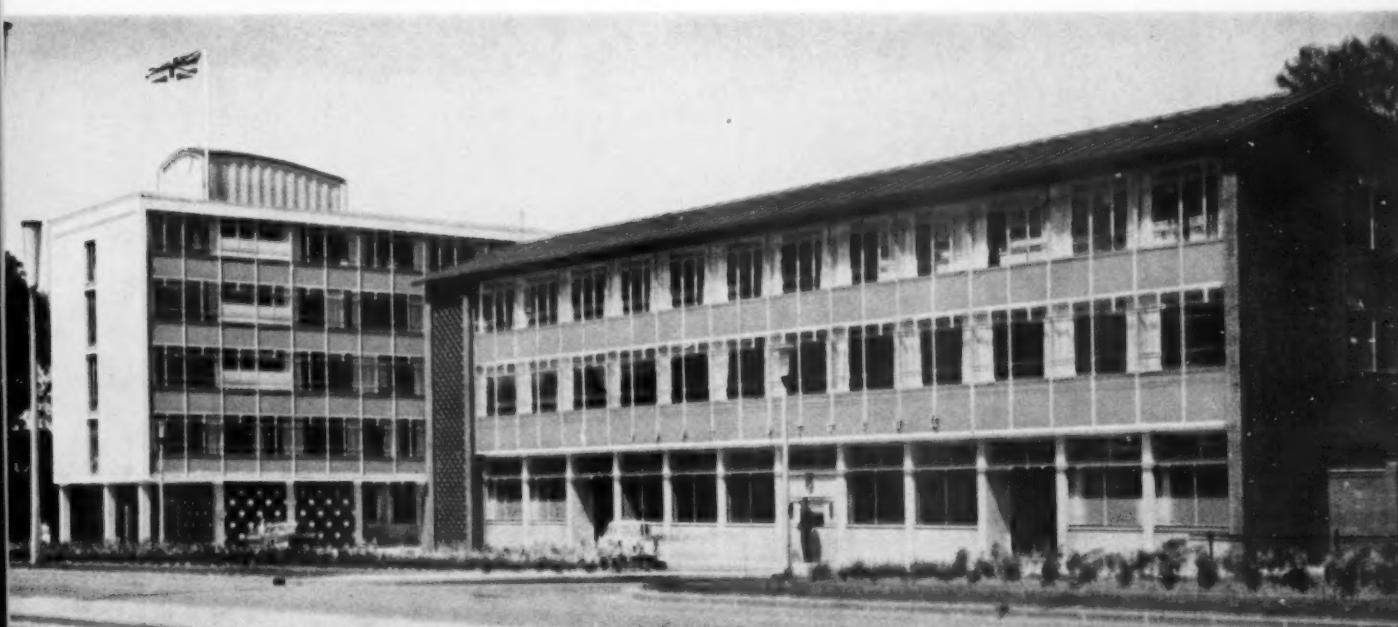


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▲ Turquoise "Muroglass" spandrel cladding for Sunbeam Electric Ltd., factory at Nerston, East Kilbride. By courtesy of Scottish Industrial Estates Ltd., proprietors of the building. Architects: Wylie, Shanks & Underwood, Glasgow.

▼ Daffodil "Muroglass" for spandrels totalling 3,500 sq. ft. approx. at Crown Building and Head Post Office, Crawley New Town. Designed by the Chief Architect's Department of the Ministry of Works.



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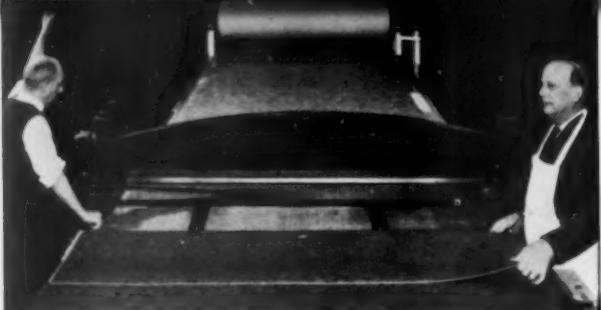
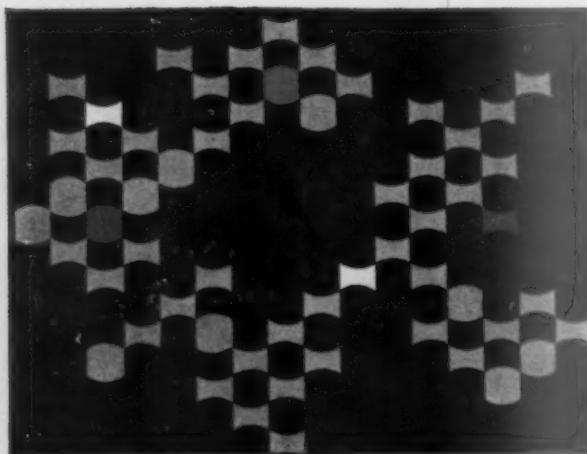


*This is the second in a series of articles designed to interest and inform architects on the techniques and scope of linoleum opportunities open to them with modern linoleum floorcoverings.*

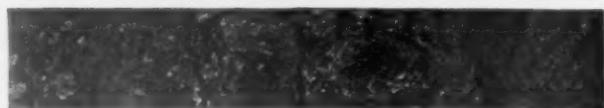
# linoleum contractors' techniques

To an increasing extent in the last few years, flooring contractors have cut linoleum into tiles instead of laying it in the form of sheet; some of them say that they use tiles for 90% of their work. This article explains some of the reasons for the change and suggests ways in which the architect can turn this new flexibility to advantage.

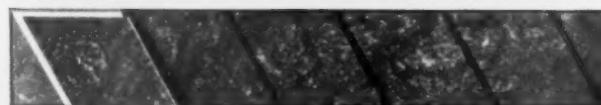
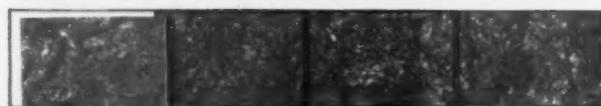
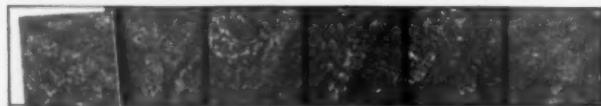
Linoleum in sheet form is still cheaper to lay when large unobstructed areas are to be covered; but when faced with complex outlines and central pillars, especially in cramped areas, flooring contractors have found that they can install tiles with very little waste of material, and at costs that are competitive with sheet linoleum. It is here that some knowledge of the contractors' techniques and working methods can help the architect to design interesting floors and still keep down costs.



Photos of guillotining and die-cutting: Courtesy E. J. Elgood Ltd.



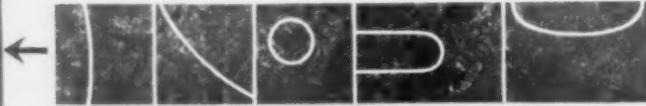
**Cutting tiles** The contractor uses a guillotine to cut 'slabs' of linoleum across the roll, wide enough to allow a small margin for trimming the tile later. The tiles themselves can be hand-cut by knife—a slow and expensive process—guillotined, or die-cut.



**Guillotining** Hand-operated or power-driven guillotines can cut squares, oblongs and triangles almost equally economically.



**Die-cutting** Some contractors have semi-automatic machines that cut tiles up to 18" square in one movement. These machines also accept special dies to cut other shapes—such as those below—simultaneously with the rectangular tile. (Both parts of the tile should be used in the design to minimise waste.) The design of such shapes should avoid running the shaped cutter into the corner of the tile, where it would create strong side pressures during cutting.





**Strip cutting** Lacing strips and border strips, in widths ranging from  $\frac{1}{2}$ -inch to 18 inches, are used to form decorative effects or borders. (For use as borders, they are cut slightly wide to allow for fitting to irregularities of the wall line.) The cutting machine slices almost through the thickness of the linoleum to make the strips, which are then finally separated as required by the layer on site.

**Economical tile sizes** Since linoleum is delivered in rolls 72 inches wide, contractors find the following sizes the most economical to cut:

**NOMINAL:** \* 9 inches, 12 inches, 18 inches, 24 inches, 36 inches.

\* Actual sizes are approximately  $\frac{1}{4}$ -inch less than the nominal sizes of all purpose-cut tiles.

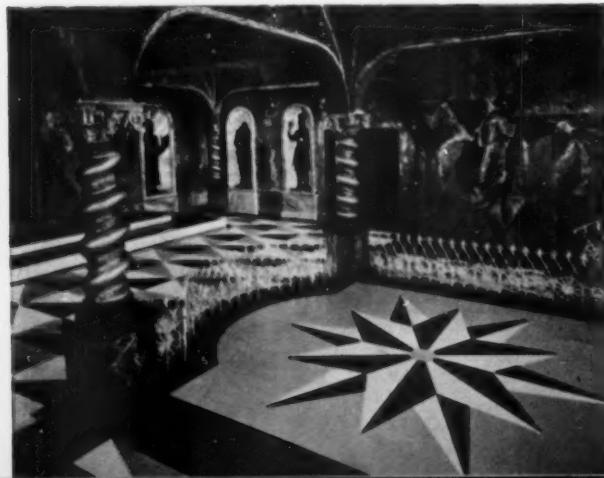


#### THE USES OF SHEET LINOLEUM

This article does not, of course, set out to show that tiles have entirely replaced the traditional way of laying linoleum in sheet form—even where the architect wants to introduce designs in his floor. Below are three ways of using sheet linoleum in individual situations:—

**Hand-cut designs** Linoleum is easier than most floor coverings to cut into individual designs, and cutting by hand offers the designer the greatest possible freedom of treatment in producing a spectacular floor like the one shown below. At such a focal point—it was, in fact, John Piper's 'Baroque Room' in *The Observer's Film Festival*—the extra cost would be amply justified.

*Courtesy Design magazine*



**IH SYMBOL DESIGNED BY RAYMOND LOEWY**  
Courtesy International Harvester Company  
of Great Britain Limited

Architects: *Albert W. Moore & Son*  
Flooring Contractors: *The Lino-Tile Co. Ltd*

**Hand-cut motifs** Most contractors employ craftsmen who will enjoy reproducing in linoleum a motif like this one, laid in the entrance hall of International Harvester's offices in City Road, London.

**Repeated motifs hand-cut by template** For special purposes, the contractor can make a hardboard or metal template to cut out several motifs—and the corresponding spaces for them in the background.

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A full-colour book illustrating new directions in floor design will soon be available to all interested architects. If you would like to receive a free copy immediately upon publication, please write to: Michael Nairn & Company Limited, P.O. Box 1, Kirkcaldy, Scotland.

#### NAIRN MELOTONE LINOLEUM

The new range of colours of Nairn Melotone Linoleum, consisting of 8 muted shades with softly blended marking, is illustrated on the right-hand edge of this page, together with a selection of colours from the plain and marble ranges in 4.50 mm gauge. A large selection is also available in 6.70 mm gauge. Please write for information to one of the addresses below or consult your technical representative.

#### NAIRN TECHNICAL ADVISORY SERVICE

Technical representatives, based at our offices in different parts of the country, are at your service to give advice or information on all matters concerning floorcovering materials. If you wish to consult one of these representatives, please write or telephone to any of the following offices:

**MICHAEL NAIRN & COMPANY LIMITED**  
P.O. Box 1, Kirkcaldy, Scotland  
Kirkcaldy 2011 (10 lines)

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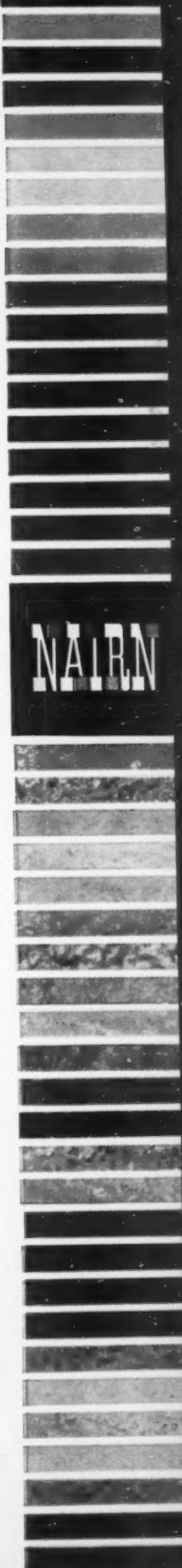
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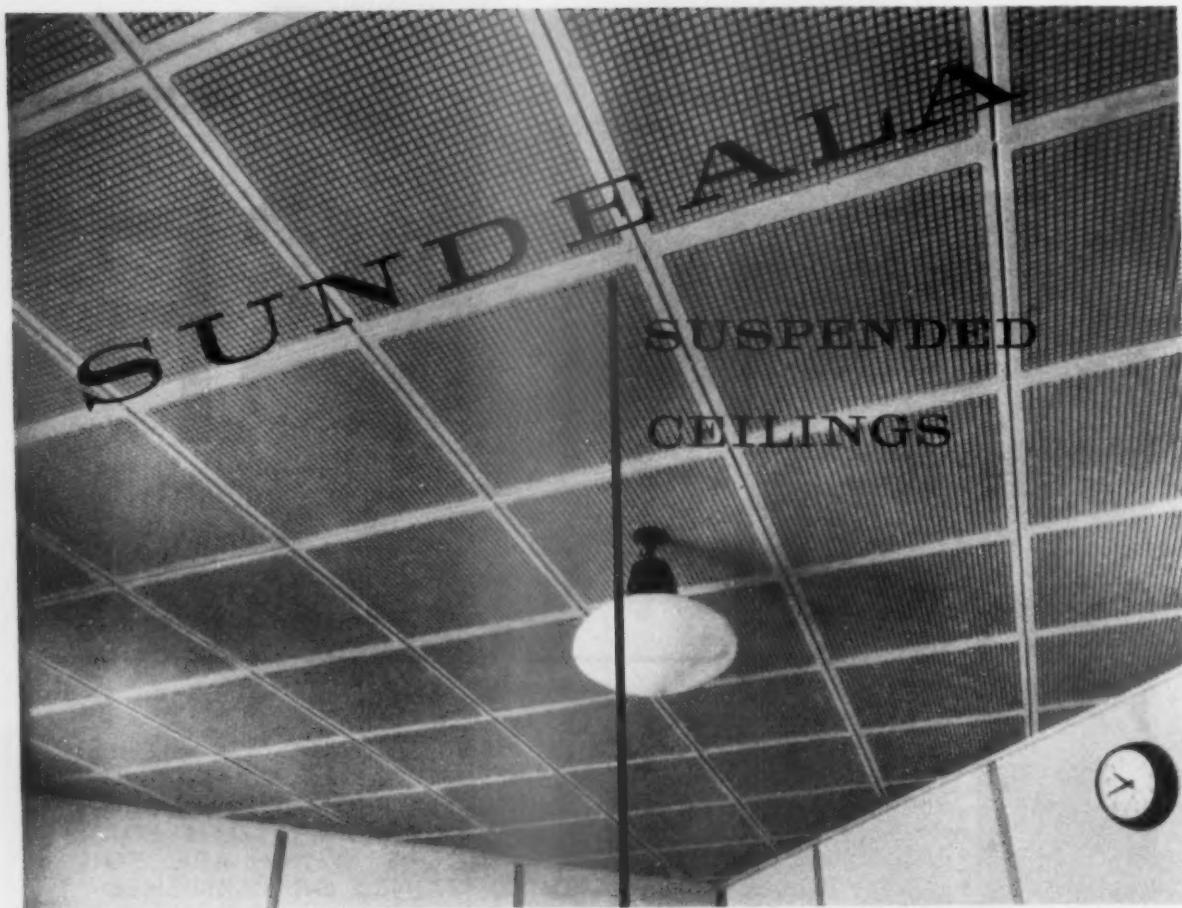
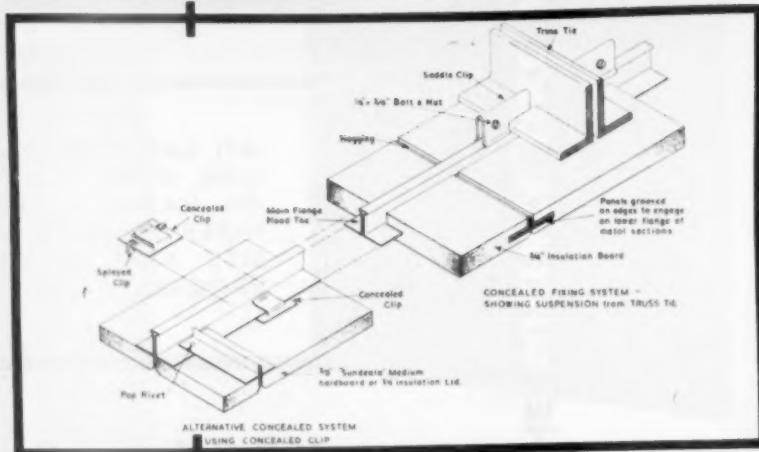


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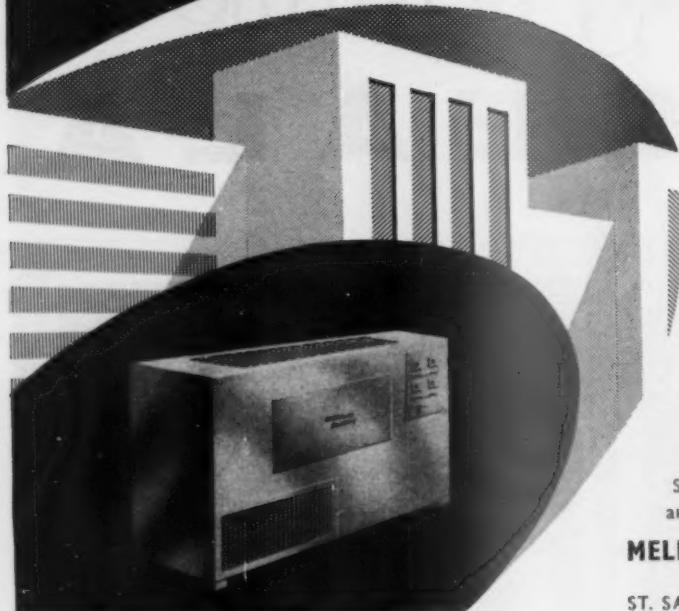
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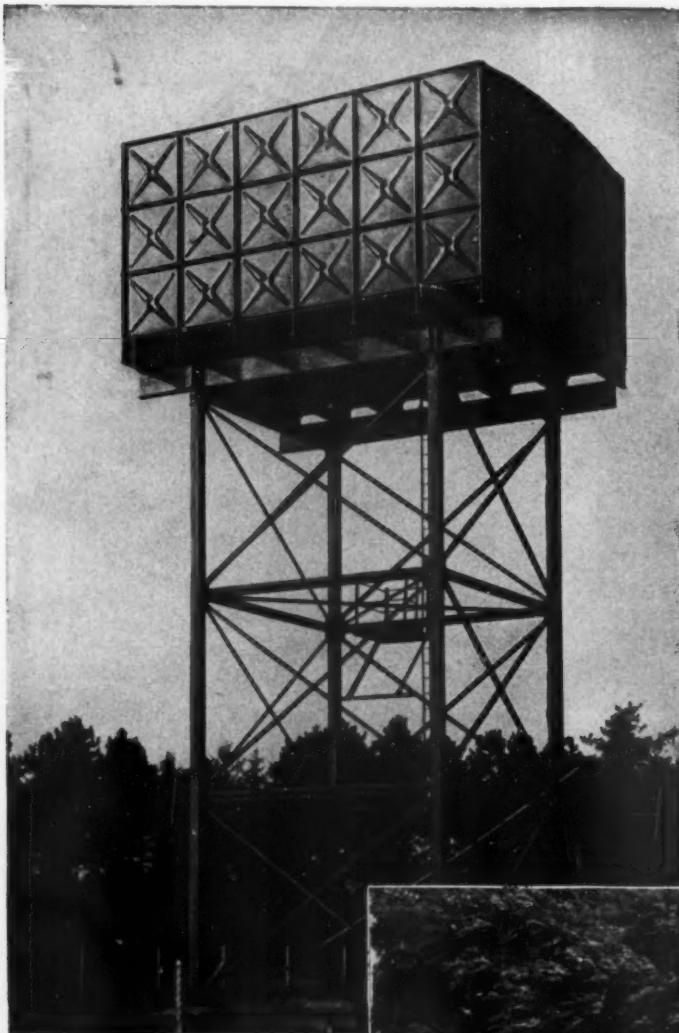
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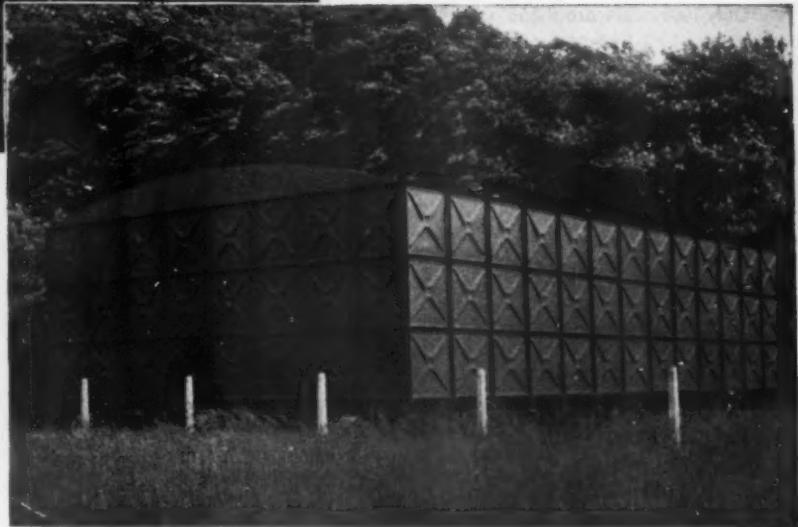
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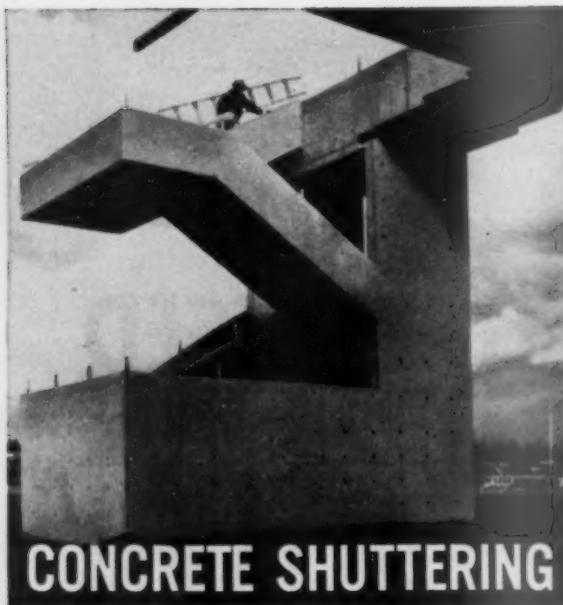
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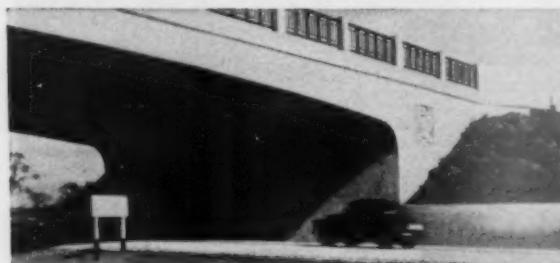
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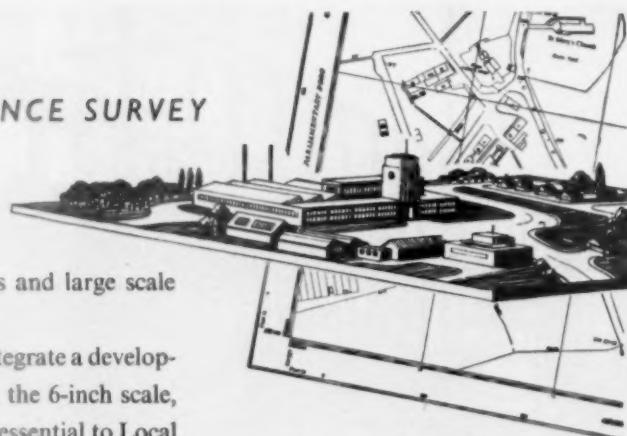
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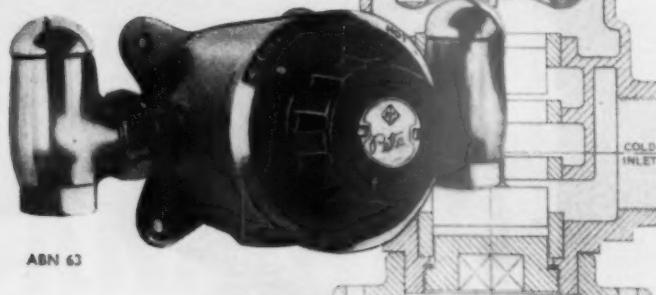
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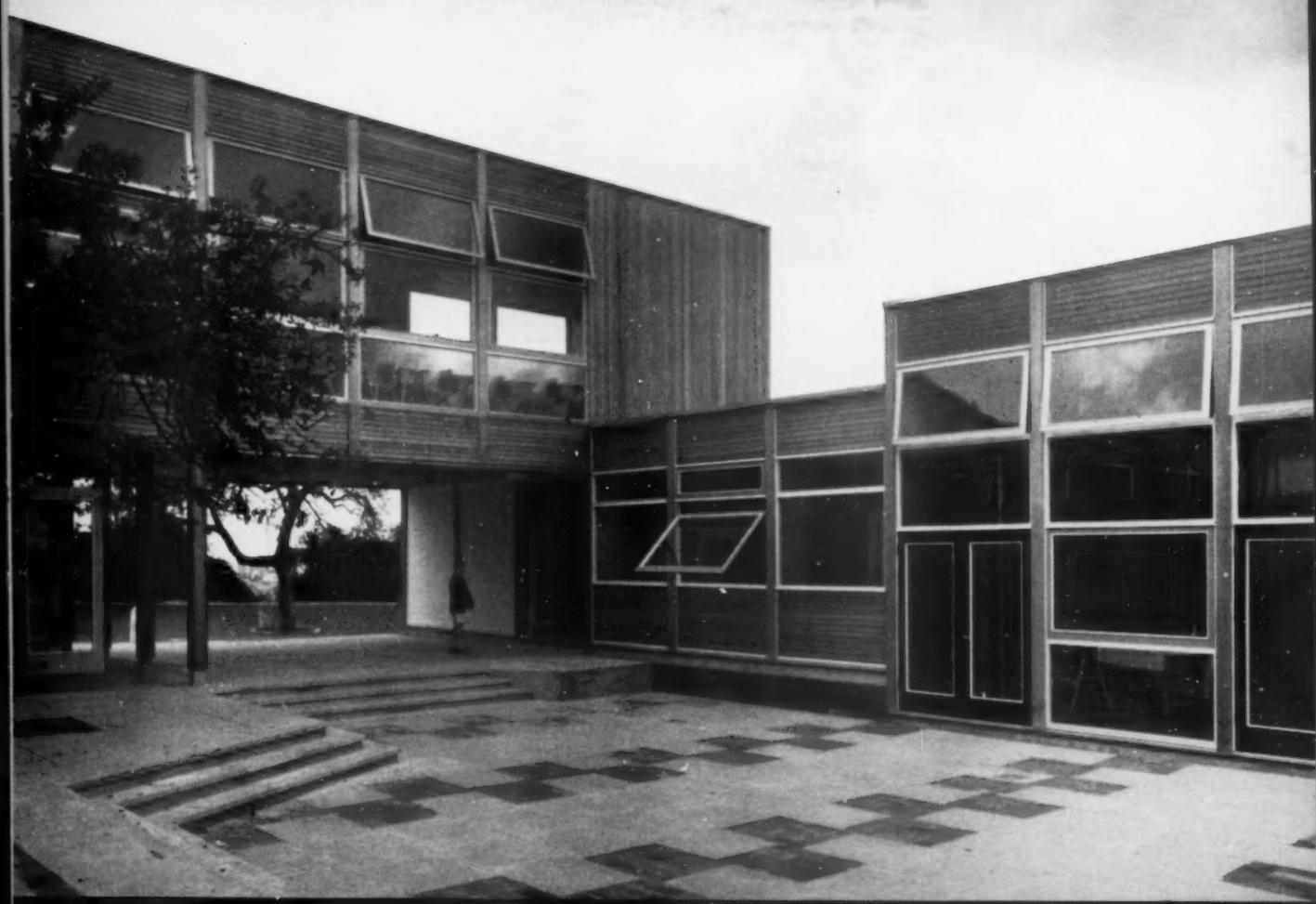
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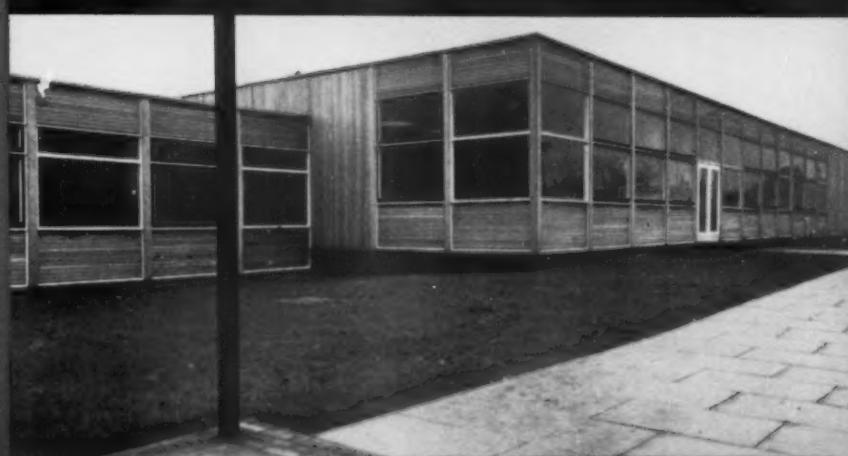


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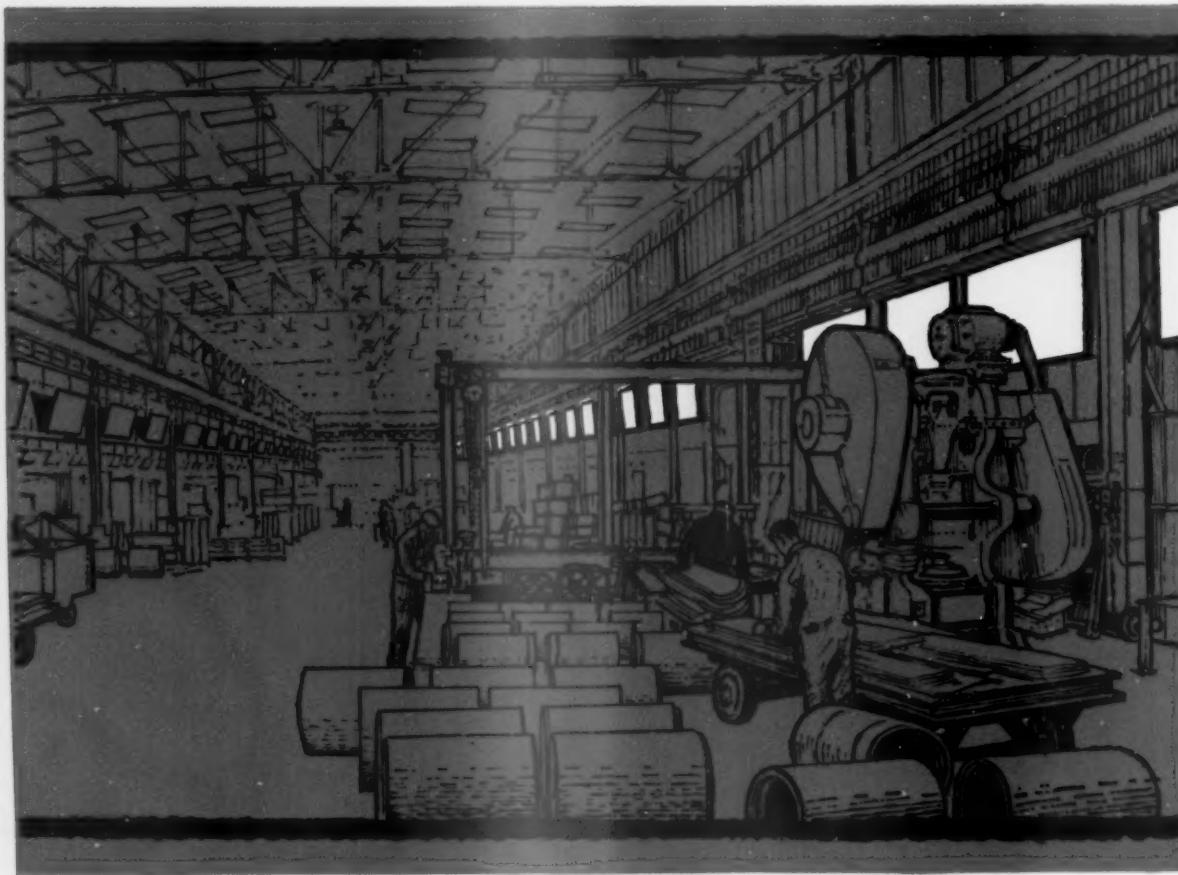


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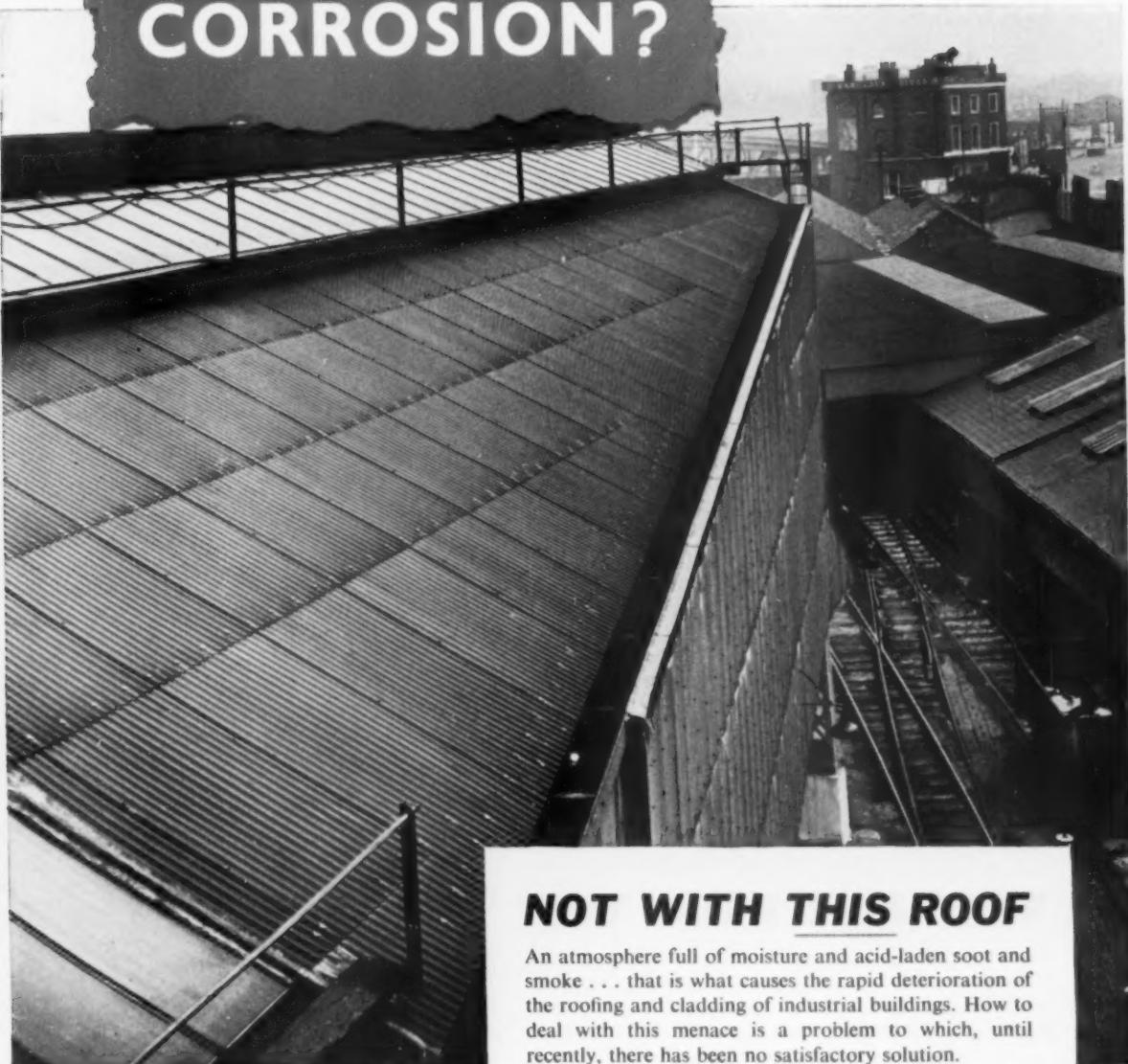
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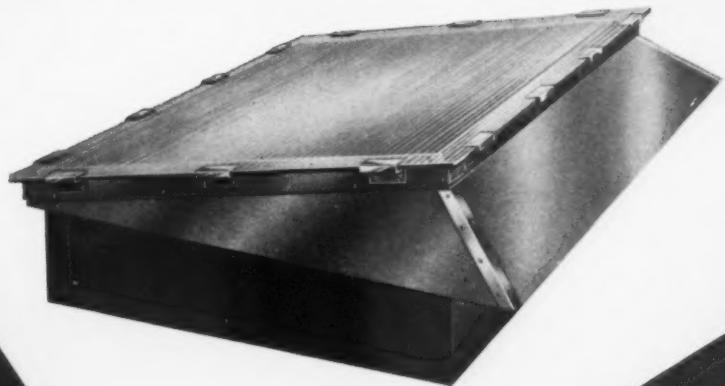
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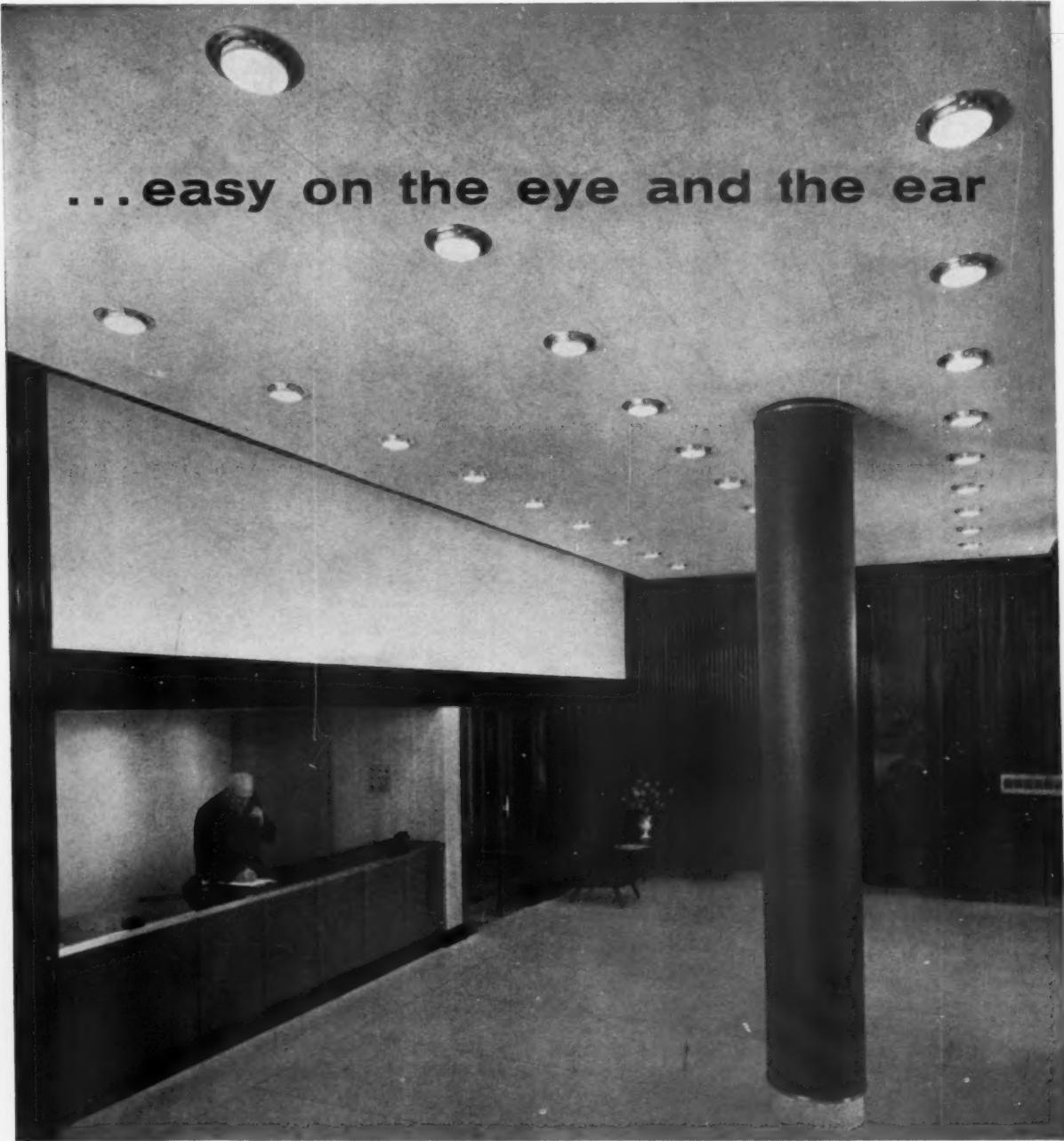
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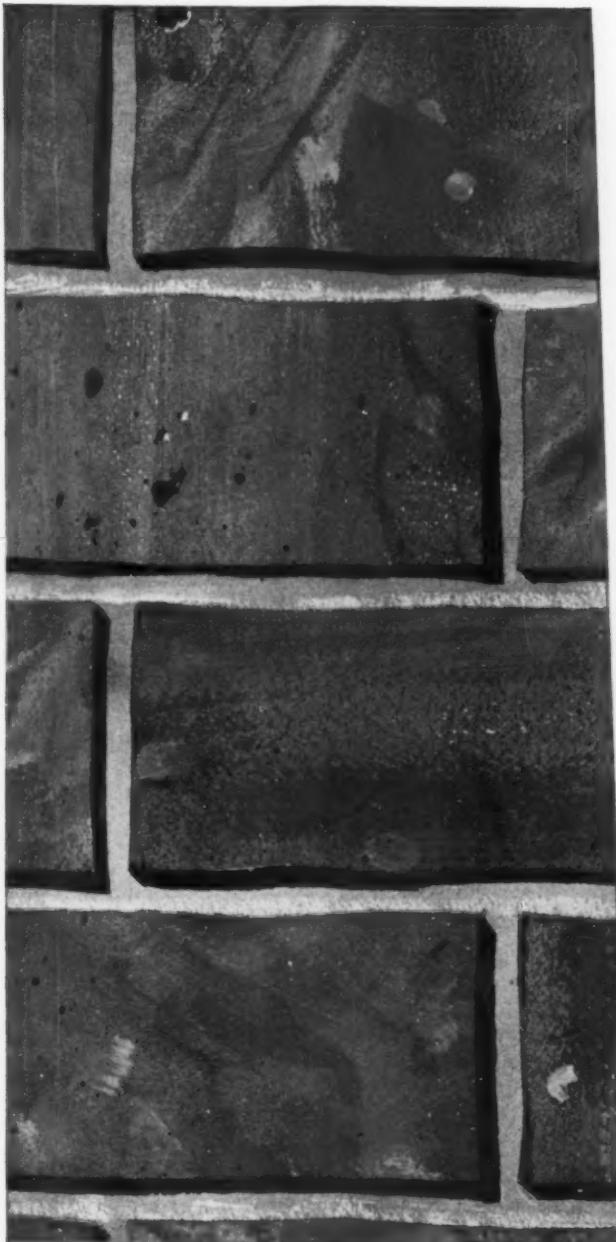
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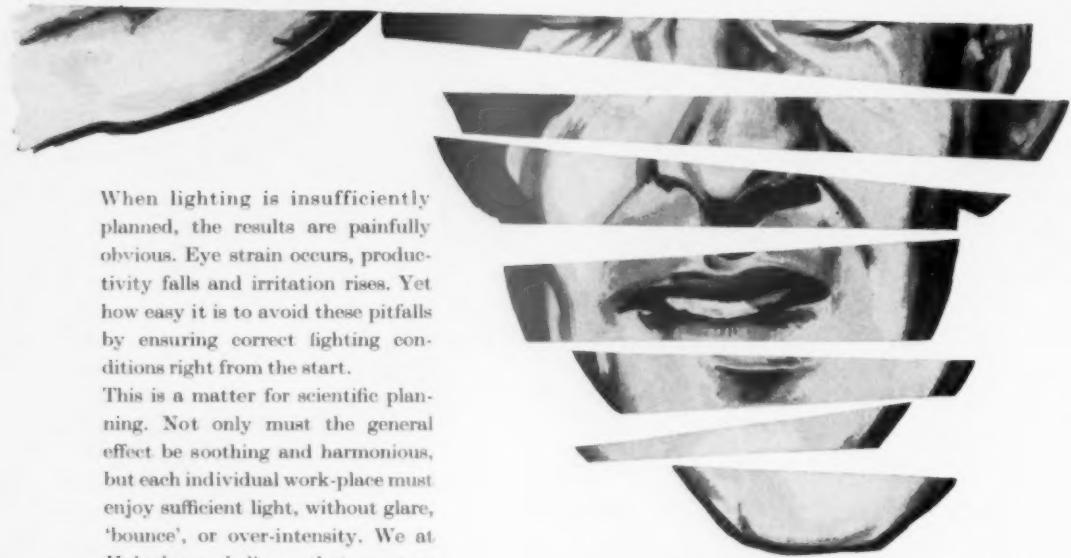


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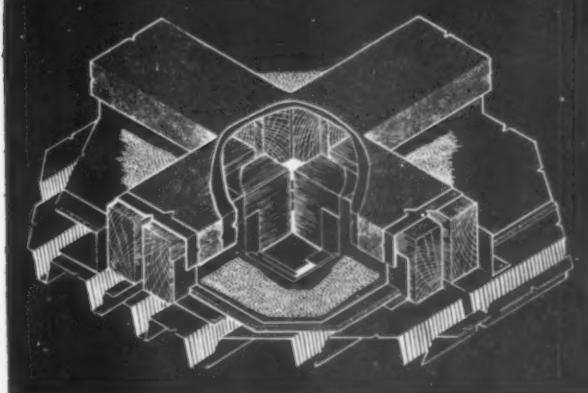
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found  
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The detail agreed for the straight runs of expansion joint was a fairly standard design of timber curb with a sliding aluminium capping angle dressed with roofing felt. A special capping section, to allow four way movement at the central junction, was designed and supplied by the Briggs Technical Design Service. The finished detail provided a neat effective joint, allowing for expansion and contraction, without any loss of waterproofing efficiency.

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**LITTLE PLACE IN THE COUNTRY...**

**A**T the entrance to the village a caterpillar digger stands like a dying dinosaur. Behind it sit four men drinking tea. Further along another man is noisily breaking up the middle of the village street. This is the main drainage scheme, long desired, long delayed, already behind schedule, and, now that it has arrived, generally distrusted. Everyone is sentimental about cesspits.

The cottage door swings rakishly on its hinges, awaking forebodings. Will it be the Hale gang from Brighton, who operate by Bentley and go for long-playing records, or the McGuffie mob, who have a helicopter in the Isle of Wight and specialize in agricultural implements? Investigation shows nothing missing. Conclusion imposes itself that we forgot to lock up again last week-end.

Across the lane the new bungalows which the local builder has run up so close they almost touch each other, lower at us like buried dwarfs. San Toy, Moorings, Taormina, Kosy Korner with a fancy wall of special mulligatawny bricks. Piles of building materials in the next field presage an early addition to the family. Beyond the visibility splay levelled by order of the council, the hedges are enveloped in standing blue cloud from the cars processing steadily towards, if not to, the sea.

The continuous whining noise from the gravel pits, of course. And in the next lane a new type of cultivator with a peculiar high-pitched screech. We unleash our secret weapon—a grass-cutter that makes more noise than anything else down here as our trousered wife tears sadistically into the tussocks. The bungalow population turn out admiringly. Fine, fine, but not helpful to that balanced paper on *Balanced Rural Community*. Drink is imperative.

Our grocer has Swiss wines and Lyons' Kup Kakes. The pub, almost buried in coaches, has pink carpeting, dinky kitchen chairs and fake candles in wrought iron sconces; also Russian cigarettes. Soon the children are tearing out to friends so as not to miss their favourite TV programmes.

Later, with unaccustomed muscles yelling from digging, throat parched from excessive smoking, we lie sleepless while a blighter of a nightingale livens it up in the neighbouring wood. Knowing that at 4.30 sharp, when sleep is sweetest, the whole dawn patrol will come crashing in.

Still, once upon a time it was all much worse—rickburning and riots and before that robbers and rapine; before that, the Roman and his trouble. And it took even longer (though not much) to get back to town.

## EVENTS AND COMMENTS

ARCHITECTURE WEEK

June 13 to 18 is Architecture Week and, coinciding with the British Architects Conference at Manchester, it will be marked by the appearance of the R.I.B.A. poster exhibition. This exhibition has been designed by Theo Crosby with text by Donne Avenell. It consists of posters bearing large pictures of good modern architecture and short statements about the training, work and general place in society of the architect. The pictures are good and the text is straightforward and sensible. A large number of sets of posters have been sent to the allied societies, which have undertaken to have them displayed. Success of the idea will therefore very much depend on their, and your, efforts.

## SCULPTURE IN BATTERSEA PARK

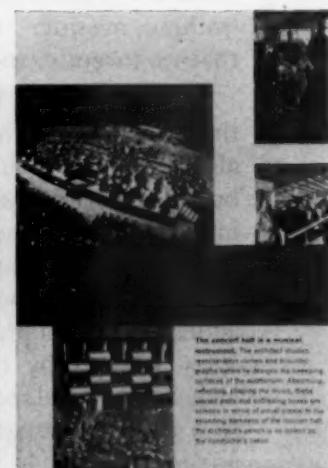
The first few days of the fifth L.C.C. open-air sculpture exhibition were grey and damp and I put off my visit till

the sun shone. The setting is perfect and once more made me wonder why we cannot have a permanent collection displayed in this way. It is a very mixed bag and impossible to appraise except by saying that all tastes are catered for. There are, however, so many different tastes in sculpture today that each has only a very small showing. In an essay in the exhibition catalogue, Philip James tries to explain all the tastes but fails to convince me. I find only the very best abstract sculptors bearable, and I mean Henry Moore and Barbara Hepworth, and the rest nowhere. My natural taste is the near-representational, represented in this exhibition by such people as Nimptsch, Kennington, Gordine and Skeaping, but I must admit to having been stopped in my tracks by Lyn Chadwick's Black Beast and Anthony Caro's monstrous Woman's Body.

Because of this very wide range of sculptural styles the exhibition does not, I think, hang together very well, but with one exhibition every three years what are the organizers to do?



These eight posters are included in the R.I.B.A. exhibition "Meet the Architect in Your Life," which will be a feature of Architecture Week from June 13-18. The exhibition may be seen at the R.I.B.A., the Building Centre and Housing Centre, as well as a number of other places, such as the Architectural Association, the Northern Polytechnic, libraries and technical colleges. Altogether, over 600 sets of the exhibition have been dispatched for showing throughout the country at places arranged by the various allied societies.



### THE QUEEN MEETS THE PRESS

My agent was present last week when Her Majesty the Queen and His Royal Highness, the Duke of Edinburgh, attended a reception for working journalists of the commonwealth at the home of Lord and Lady Astor of Hever at 18 Carlton Terrace. About 500 men and women journalists from overseas, the provinces and London were present. Guests were assembled in the dining room, library and a marquee on the terrace. The Queen and the Duke walked from room to room stopping here and there to talk informally with the journalists. Prince Philip spoke to my agent and showed he was no stranger to the A. & B.N. and the technical press.

### ASBESTOS CEMENT REVIEW

Regularly each quarter the *International Asbestos Cement Review*, a very smart three-language magazine, appears on my desk. All the same, it is something of a mystery. Published in Zurich and beautifully produced and printed, it has a long list of foreign correspondents and illustrates, generally speaking, only work of architectural merit in which asbestos cement in some form has been used. It must be backed by some international asbestos-cement organization for no subscription is demanded and it carries only one page of advertising. I mention it for its very high standards in photography, drawings, information and layout.

### S.S. ORIANA

For many years now the advent of a new Orient Liner has been of considerable importance in the art and industrial design world. Since the *S.S. Orion* was named the "O'Rorke" by architects, we have had a steady flow of ships remarkable not only as ships, but also as examples of the best contemporary practice in interior equipment and design. That this is so is largely due to the efforts of Sir Colin Anderson, who needs no introduction for he is long-established as the Frank Pick of the Orient Line.

This is not to say that the rest of the managers of the Orient Line were not long ago converted to the merits of good contemporary design. It would be unkind to suggest that Sir Colin stands alone in this respect. Nevertheless, his pre-eminence in the design world ensures that each succeeding Orient ship is not just a repetition of what has been done before, but a development incorporating the latest ideas in decoration and equipment produced from the brains of some of the best designers in the country. I am not qualified to comment on *S.S. Oriana* as a ship nor to compare her naval design with her rivals throughout the world. No doubt her many special structural and mechanical features make her as much a leader as does her accommodation. The fact remains that the Orient Line is still almost alone among British shipping firms in its devotion to top level interior design. I say almost for the *S.S. Canberra*, the new P. & O. ship, is only six months behind *S.S. Oriana* and has another and equally distinguished team of designers working on its accommodation.

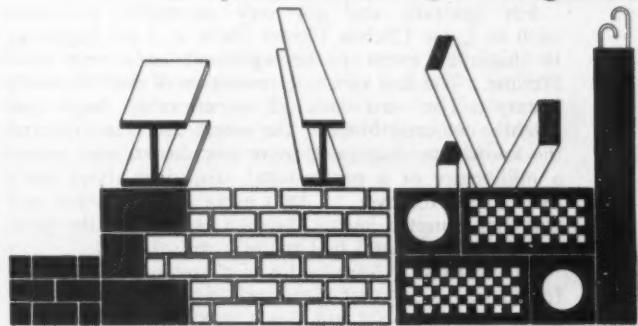
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The *S.S. Oriana* is due to start on her maiden voyage round the world on Saturday, December 3. Trials of some of her equipment are already taking place in dock at Barrow-in-Furness, where she was built. As a foretaste of what the ship will be like when finished, her managers, led by Sir Austin Anderson, last week held a party for the press at which samples of furnishing materials, colour schemes, furniture, fittings and equipment were on show, together with some of the paintings



## the ARCHITECT

puts things together



An enlarged view of one of the posters. Life size the posters are 3 ft by 2 ft

which will be hung in the public rooms. The schemes, as one would expect with Milner Grey, Misha Black, Kenneth Bayes, Nevile Ward, R. D. Russell, Robert Goodden and Olive Sullivan among the designers, are fresh and delightful. Generally speaking, pattern has been confined to curtains, bedspreads and carpets, and I noticed quite a wide use of floral designs for curtain materials. The outstanding development seemed to me to be the almost universal use of plastic wall-covering materials in place of painted surfaces.

\* \* \*

I was told that this had been found to be highly serviceable and to wear very well. Although expensive in first cost, it has the tremendous advantage of removing the necessity of filling the ship with painters at the end of each voyage when due to accelerated schedules, the turn-round time is very short. No doubt this development has been very much assisted by the really first-class colours and textures in which these materials are now being made. It is interesting too to note how the choice of materials is spread between manufacturers to the point that almost every well-known name in textiles and floor coverings is mentioned in the long and detailed lists of firms.

The tableware generally is of the standard one would expect, and the stainless steel tea and coffee sets, and the bowls and dishes are particularly good. The cutlery,

## EVENTS AND COMMENTS CONTINUED

too, was specially designed and is claimed to be equally comfortable for those who hold their knives in the English, Continental or American way. I was not able to test this claim, but to me the cutlery looked much like any other modern cutlery—not very comfortable on either hand or eye. This was my only criticism of a most interesting and promising display.

It would have been interesting to have had the scheme for the *S.S. Canberra* alongside for comparison. Let us hope that the P. & O. Line, which is anyway now all one with the Orient, will have a similar exhibition. Since yet another Anderson Knight, Sir Donald, is the chairman, there is at least a chance. Among those present at the *Oriana* party were the captain, the purser and the man who is building her. It gave a touch of reality to the drawings and samples to see them in the flesh.

### THE CHELSEA FLOWER SHOW

For ignorant, and not very successful, gardeners such as I, the Chelsea Flower Show is, I am beginning to think, an event to be witnessed once only in a lifetime. The first visit is a revelation of overwhelming beauty. The vast area of unbelievably large and brightly coloured blooms, the smell, and the skill and the knowledge displayed, leave one dazed, and, unless a millionaire or a professional, dispirited about one's own efforts for ever. I kept away for five years and was then tempted back. As soon as I was in the great tent I realized that I had made a mistake.

All the same, I found a lot of changes for the better. It seemed to me that the standard of presentation of many of the exhibits was much improved, colours were more skilfully blended or contrasted, and there seemed to be an improved awareness of the benefits of grouping. We have already read elsewhere that it was the orchids that stole the show. Their variety and colours defy description. Perhaps even more than variety and colour it was their quality that impressed me. The traditional shows of vegetables reflected I thought the nation's changing views on eating. The old idea that everything must be twice life size to be any good seems to have gone. Instead we find perfection in shape and colour and a suggestion that many vegetables are better eaten young. This is progress indeed.

There are fewer show gardens than there used to be and this is no great loss. The rock gardens are as beautiful and as artificial-looking as they used to be. The gardened "plots" have made little progress and the two prizewinning designs from a *Daily Express* competition seemed to me to incorporate too many half-digested ideas from the shiny papers. Perhaps the biggest improvement was in the design of garden furniture and tools. There was still a lot of rubbish but much of the teak furniture was neat and pleasant to look at. Standing looking at some of it I was held by its wonderful smell and a feeling of acute but unidentified nostalgia. Then I remembered the steamy-hot teak forests of Burma during the war. Garden tools and gadgets have taken to good design in a big way. Credit for this must I think be given to the Wilkinson Sword Co. who were the pioneers some years ago. Now they have a host of competitors.

I have noticed before that gardeners come from every walk of life and the Chelsea crowd must present one of the clearest cross-sections of the population. I came

away very early but the ground was already packed and every fourth person was engaged in taking colour photographs. As I left, a feeling of hopelessness for my own little plot surged over me. I am afraid you will have to wait at least another five years for my next report on the Chelsea Flower Show.

### U.G.C. ARCHITECT VISITS NORWAY

I hear that Mr. Stanley Meyrick, chief architect to the University Grants Committee, is in Norway. He is lecturing and taking part in seminars in Oslo and Trondheim. His audiences will be drawn from the Norwegian Ministry of Education and University authorities. He will be speaking about the problems associated with the physical development of British Universities. We do not hear very much about the U.G.C. but it is gradually becoming more lively. Without doubt some of the improvement in the architectural standards of our new university buildings can be attributed indirectly to its architects' department. Such an important organization should have its own development group as the ministries have. At present I believe no central body does research on the requirements of university buildings. Here is a wonderful chance for one of our modern philanthropists.

### THE OTHER FINE ART COMMISSION

The Royal Fine Art Commission for Scotland has just published its first report. This is pretty good going considering that it was set up in 1927. In spite of its modest use of the public funds—its budget for 1960-1 is only £335—the Commission does a lot of work. I do not know whether its terms of reference correspond exactly with the English R.F.A.C. but it seems to do the same kind of work and suffer the same kind of frustrations. Some of its troubles are put down to "unawareness of the new body's powers or even of its existence". With one report in 33 years this is not very surprising.

### SOVIET STIRRINGS

The following note appeared in a recent issue of the *Architectural Forum*.

One of the first Soviet activities to be "liberated" following Stalin's death over six years ago was architecture, but recently Soviet architects have complained that they are not getting needed support from either the Government or the Communist party. Architect Aleksandr V. Vlasov, writing in the influential government paper *Izvestia*, recently charged that, although architects are labouring to achieve "reasonable simplicity and function" in design as a reaction to the more traditional rococo Russian style, builders and city planners are lagging behind. Also, Vlasov charged, there is no effort being made to educate the people to know and appreciate good "style" in furniture and clothing, as well as architecture, sculpture and painting. Vlasov also said that architects cannot do an adequate job in the face of the conservative design traditions followed by many of the Soviet communities and republics.

Soviet architects have been grumbling that builders have not done justice to their advances in design, and more recently there has been some criticism that the architects themselves have not been providing the proper leadership for the Soviet building boom. This is reportedly the reason for Vlasov's article. How much effect Vlasov's article will have remains to be seen, but at least architecture no longer seems to be the stepchild it was for nearly 40 years under the Bolsheviks and Stalin.

**ABNER**

## THE CRISIS OF URBAN ENGLAND

Alfred Bossom Lecture 1960 at the Royal Society of Arts on June 1 given by the Hon. Lionel Brett

After referring to the disastrous change for the worst that had occurred in many of our large towns during the last century, Mr. Brett prescribed his remedies for our present problems.

He suggested a thorough overhaul of our transport systems, not overlooking the possibilities of such methods as taxation to force heavy goods on to the railways and canals and so relieve the roads; the use of miniature taxis; and the "ruthlessly tidal use of public transport" to clear rush-hour crowds quickly. In addition, the methods Mr. Marples had brought back from his foreign travels would also be useful, however belated they were.

We should no longer allow roads to be cluttered up with horse-drawn vehicles, cyclists or pedestrians. The horizontal segregation of pedestrians as in New Town shopping centres was delightful, but limited in its application, and vertical segregation with all its difficulties and cost was undoubtedly the final answer.

\* \* \*

In areas which could not be totally rebuilt, elevated motorways were inevitable and Brussels had shown how quickly we could run them up. But our cities had few existing streets, wide and straight enough, to take them, and once they started intersecting and over-riding the existing pattern, they could be as destructive of human and land values as were the elevated railways in South London.

In areas such as the Barbican, which were being completely rebuilt, a complete system of elevated footways was possible—so called podium planning where all the shops and pedestrian entrances were at first-floor level. But it would be difficult to have a patchwork of elevated motorways and footways, and we had to make up our mind in each area which we wanted. Possibly the ultimate solution would be a three-tier system with parking and servicing at the bottom, pedestrians in the middle and fast motorways above.

But whatever system we adopted, we should also have to reduce the total load in the congested central areas by internal decentralization through the creation of new centres in the suburbs. These would not be merely shopping centres but commercial centres as well, with the big office buildings which were the main generators of traffic. These centres should be at least five miles out and be linked by new motorways and by a circular tube or monorail. The result in terms of densities, traffic and land values would be a range of smaller peaks instead of one single colossal pyramid as at present.

\* \* \*

These methods might deal with the present situation, but there remained the problem of natural growth and of immigration. To deal with these we needed controlled migration not into small nearby satellites like the New Towns, but into new major cities of half a million people each, sited well away from the London-Birmingham-Liverpool axis. He had in mind places like Hereford, Louth or Dumfries or possibly old industrial areas like Teesside or South Wales. It seemed to be clear that only migration on this scale could prevent the eventual fusing together of these conurbations as each link with the motorway spawned its inevitable dormitory.

We needed Government-sponsored research into these and other possibilities. Towns should have their local



Above, interior of the waiting room at a recently opened bus station in Three Bridges Road, Crawley. Separate inquiry counters are shown for London Transport and Southdown services, and a self-service tea bar. Below, the exterior showing cantilevered "fingers" supporting the canopy



reconstruction committees to fight for the cause against the many other calls on local finance and enthusiasm, and existing civic societies should muster public opinion. The way to renew cities was not to clear large areas and rebuild them completely. The right way was for old and new to co-exist like the cells in a living organism, the best of the old given new life by painting and planting, and the new embracing it, contrasting with it, setting it off. We needed a natural urban renewal agency to work out techniques and possibly to start the ball rolling, actually finance a full-scale project in some suitable city.

After his paper Mr. Brett dealt with a lively series of questions from his audience, many of whom seemed to be by no means convinced by his arguments particularly on the proposal to build large new cities. Lord Bossom, the chairman, in his final remarks, reminded us that although over £400 million was raised annually in motor taxation, the Government were still only spending £60 million a year on roads.

## NEWS

### Thirty-four New Hospitals

Details have been issued of the 34 new hospitals, which, as the Minister of Health, Mr. Derek Walker-Smith, Q.C., recently announced (see *A. & B.N.*, June 1), are partly completed, started or planned. They form part of 180 major schemes in various stages of development, more than 60 being for over £1 million. The new hospitals are as follows:—

#### Partially Completed and in Use

**ENGLAND:** Balderton Hall, near Newark (Psychiatric); Good Hope, Sutton Coldfield; Greaves Hall, Southport (Psychiatric); Princess Margaret, Swindon.

**WALES:** Llanfrechfa Grange, Newport (Psychiatric); Oakwood Park, near Conway (Psychiatric); Singleton Park, Swansea; West Wales, Glangwili.

#### New Hospitals on which Work is in Progress

**ENGLAND:** Cambridge (Teaching); Crawley; Harlow; Hensingham, W. Cumberland; Huddersfield; Peterborough Memorial; Royal Marsden Hospital, The Downs, Sutton (Branch of Royal Marsden Teaching Hospital); Sheffield (Teaching); Welwyn-Hatfield.

#### New Hospitals Planned

**TEACHING:** Cardiff; Charing Cross; Liverpool; Royal Free; St. Mary's Maternity, Manchester; St. Thomas', London; United Birmingham Hospitals; United Liverpool Hospitals.

**OTHER THAN TEACHING:** Boston; Coventry; Psychiatric Hospital, Northamptonshire; North Tees-side; North-West Metropolitan Regional Hospital Board; Slough; South Manchester; Truro; Wembley.

### Hospital Discussion Meeting

News that hundreds more architects will be needed for the hospital building programme (*A. & B.N.*, May 18) lends topicality to a discussion meeting at the A.A. on June 15.

J. O. F. Davies, senior administrative medical officer, Oxford Regional Hospital Board, will start the meeting at 2 p.m. with a talk from the point of view of the client of a new hospital. W. J. Jobson, the Board's architect, will follow with *The problem of hospital design today*, and chairman John Weeks will wind up the afternoon session by discussing *The hospital consultant architect*.

After tea Philip Powell, O.B.E., will speak on *The Princess Margaret Hospital at Swindon*, illustrating his talk with lantern slides. This will be followed by a general discussion. The meeting is scheduled to end at 6 p.m. Tickets for A.A. members only.

### Architects Busier this Year

Architects, quantity surveyors and builders were now generally much busier than they were last year or in 1958, it was reported when the National Joint Consultative Committee of Architects, Quantity Surveyors and Builders conferred with the chairmen of regional consultative committees recently.

It was added, however, that there was a dearth of smaller schemes in some districts. Concern was expressed about a shortage of qualified professional staff, particularly architects' and quantity surveyors' assistants, which was seriously hampering the pre-planning of jobs; about a shortage of key craftsmen, notably carpenters and joiners; and about the future availability of land, especially for private house building.

The conference confirmed that the position regarding the supply of bricks and reinforcing rods had not improved,

and the development of a cement shortage in the north-west was reported. It was announced that the national committee would be concerning itself in the coming months with the preparation of a code of procedure for project management as a sequel to the code of procedure for selective tendering and *Plan Before You Build*. It would also be paying special attention to public relations.

### B.M.C. Factory for Scotland

Work is to start within three months on the construction of an £11½ million British Motor Corporation factory on a 100-acre site fronting the main Glasgow to Edinburgh road near Bathgate, West Lothian.

The new plant will consist of three buildings each 1,020ft long running parallel with each other. The first building is due to be completed by the middle of next year and the others about nine months later. About 5,600 people will be employed.

Architects for the factory are Harry W. Weedon and Partners, Birmingham. Robert M. Douglas (Contractors) Ltd. will carry out the first £200,000 worth of preliminary site work and more detailed drawings and bills of quantities are being prepared for the remainder.

### "New Towns" in Northumberland

A big drive to attract light industry to Northumberland was launched at a press conference in London last week.

Declaring that the prosperity of the area depended on a group of industries particularly susceptible to fluctuations of world trade, the Duke of Northumberland said it was essential for them to diversify this industrial structure. About 10,000 people a year were leaving the north-east industrial area for the already congested Midlands.

Work was expected to begin next year on the construction of two "new towns" near Newcastle—North Killingworth and Cramlington. Development of North Killingworth would be controlled by the county council and the population target was 17,000. Cramlington, on the other hand, would be built largely by private enterprise, and the population aimed at here was 40,000.

Excellent services were available in the county's industrial zones, said the Duke, and transport facilities were being improved.

### Electricity in the Home

How electricity could be used for home heating in large housing estates was dealt with by Mr. T. E. Daniel, past chairman of the British Electrical Development Association and chairman of the North Western Electricity Board, in his paper on *Electricity in the Home* at the British Electrical Power Convention at Bournemouth.

He said it would be a short-sighted policy for electricity supply authorities to appear reluctant to encourage all-electric schemes for large local authority housing estates on new town or overspill sites because of the heavy capital investment entailed in the distribution network.

There was a need to examine ways of developing storage heating systems for existing property, and in this connection the use of ceiling heating offered possibilities. What was needed was a lightweight heat storage medium which could be fixed below existing ceilings where the height permitted. Experience with low-temperature radiant ceiling heating in domestic property indicated that this could be an acceptable form of heating, and the all-electric house of the future might well have both floor and ceiling heating controlled in such a way as to achieve the optimum comfort conditions and the maximum economy. Heat insulation in new houses would be a great help in developing the use of this type of heating.

"There is little doubt," Mr. Daniel said, "but that in the next few years we shall get more ambitious in our uses for electricity in the home and the more extensive use of the so called infra-red heaters introduces interesting possibilities

of building these heaters into the structure of houses to create local comfort zones."

He said that an electric heating installation was lower in capital cost than competitive systems. This applied particularly to new premises, where a floor-warming installation might cost from as little as 2s per sq ft of floor area to a maximum of 6s 6d per sq ft. Running costs might be as low as 5s 9d per week for small flats for old persons and 10s 10d per week for a complete heating scheme for two bedroom flats.

Discussing future prospects, Mr. C. R. King, chairman of the Electricity Council, forecast that by 1963 some 85 per cent of farms, over 90 per cent of other rural premises and some 95 per cent of all families in the land would have been afforded an electricity supply.

### Apprentice Masons Compete

At a time when craftsmanship is said to be dying out, the annual masonry apprentices' inter-regional competition, which is being held this year at the Bath and Portland Stone firms' Corsham Works, Westwells, for the first time, proves that the craft of skilled masonry is very much alive.

Representatives of the London and Portland areas will compete against the south-west team on June 18. Eight apprentices—two each from the second, third, fourth and fifth years of their training—will each be given a "set piece" to work, and this will be judged by a panel which will include Mr. C. A. Linge, Clerk of Works of St. Paul's Cathedral. A shield will be presented to the team with the highest aggregate.

As well as creating a competitive spirit among the apprentices, this competition gives them experience of working and competing in various types of local stone, since the contest is held in a different region every year. The south-west team has only been introduced into the inter-regional competition during the past two years, and as the apprentices are drawn largely from the Bath and Portland Stone firms it is appropriate that they should be hosts this year, for the first time, to the other regions.

### Firm's Chief Architect

A. H. Anderson Ltd. announce that they have appointed Derek Stephenson, B.Arch.(L'pool), Dip.T.P.(Lond.), A.R.I.B.A. as chief architect to the company.

As the firm's senior technical officer, he will be responsible for overall control and co-ordination of the architectural, surveying and contract management groups established within the company, and for liaison with associated architects, quantity surveyors and consultants.

This integration of all the professional and technical groups handling a project is in line with the company policy to provide a comprehensive design and management service within which the disciplines of the cost analysis, the cost plan, the fixed-price contract and the controlled contract period are effectively practised.

### Shops at Cowley in Demand

Work on the new shopping centre at Cowley, which is designed to attract shoppers away from congested Oxford, is expected to begin in the autumn.

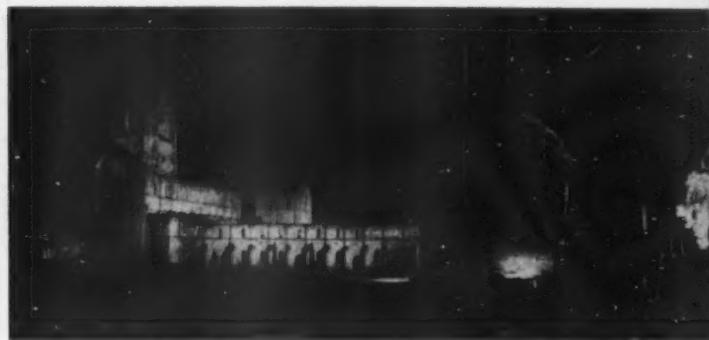
The city architect, E. G. Chandler, says the response from commercial firms to the plan has exceeded expectations and that there is no reason to suppose it will not be a successful centre. Among the 80 or so firms that have agreed to take premises in Cowley are many large multiple stores.

### More Houses in April

The number of permanent houses completed in Great Britain during April was 25,084, compared with 22,655 in April 1959. In the first four months of 1960, 91,560 homes have been completed (83,324 in the same period last year). Of these 49,465 were built by private enterprise and 42,095 by public authorities.

### Colour Comment

The value of the correct use of colour and lighting in improving working conditions, with subsequent benefits to production, health and safety, was now accepted by



Floodlighting at Fountains Abbey, Yorkshire — in colour, too — provides an exciting spectacle for visitors

enlightened industrialists, it was stated in the annual report of the British Colour Council, which has prepared special schemes for various firms during the past year.

Sir Ernest Goodale, C.B.E., M.C., was re-elected president of the Council and Mr. Henry G. Dowling was re-elected chairman.

### N.F.B.T.E. v. "The Vitruvians"

The national president, Mr. D. E. Woodbine Parish, has selected the following team to represent the National Federation of Building Trades' Employees at its annual cricket match against "The Vitruvians" (the trade and technical press) tomorrow (June 9). The match will take place at Richmond Cricket Club's ground; play will begin at 11.30 a.m.: J. A. Bird (Captain), Liverpool Federation; V. R. Blake, Eastern Federation; B. Cartledge, Yorkshire Federation; A. Cload, L.M.B.A.; A. Longman, Southern Counties Federation; R. T. Nickless, Southern Counties Federation; M. Ruffell, Southern Counties Federation; J. Sellers, Yorkshire Federation; S. G. Shepherd, Liverpool Federation; F. Vidler, L.M.B.A.; J. Walker, South Western Federation; 12th man—C. F. Kidman, Eastern Federation; Umpire—P. J. Flitton N.F.B.T.E.

### L.M.B.A. Golf

The L.M.B.A. Guests' Day golf meeting held at Addington Golf Club resulted as follows:—18 holes single Stableford for guests playing with members of the society: Guests, D. Seale 33 points 1st; McQ. Leslie 2nd, 30 points (best last nine holes) (Tie A. J. Waters). Members, W. Woodcock 33 points; W. B. Barrett 30 points (best last nine holes) (Tie P. B. Prowting).

In the afternoon members with their guests played in the Stableford Greensome v. Bogey, which was won by P. N. Cox and J. Goodliffe with a score of 41 points. Runners-up were P. B. Prowting and S. E. T. Williams, 40 points.

### Professional Announcements

Frank Rutter, F.R.I.B.A., has opened an office at 60 Woodbridge Road, Guildford (Tel.: Guildford 60235). The office at 2 Finchley Road has been closed.

The former practices of J. S. Thompson, A.R.I.B.A., of C. E. Hanscomb, South Street, Epsom, and of V. W. R. Gardner, A.R.I.B.A., Glebe Road, Cheam Village, Surrey, have been amalgamated. They are now in joint practice as follows: Thompson & Gardner, A.R.I.B.A., Chartered Architects, Surveyors and Town Planning Consultants, Grove House, 6 Grove Road, Sutton, Surrey (Tel.: Vigilant 4436).

L. G. Mouchel & Partners, Consulting Civil Engineers, after some 60 years at 38 Victoria Street, S.W.1, are moving during the middle of June to offices at Southbank House, Black Prince Road, Albert Embankment, London, S.E.11 (Tel.: REL 7691).

Lesslie K. Watson and Harold J. Coates have taken into partnership Denis S. Knight, A.R.I.B.A., A.M.Dipl. The firm will continue to be known as Watson & Coates.

## Law and Administration

### Inspectors' Reports

When the *Franks' Committee* heard evidence about the publication of inspectors' reports, it became clear that Government witnesses were strongly opposed to any proposal to publish such reports. One of the arguments against the proposal was, the committee were told, "... that there is in fact no evidence of widespread demand by the public to see inspectors' reports . . .". In contrast to this official view the committee reported that "the evidence presented to us has paid more attention to inspectors' reports than to any other aspect of the procedure". And, what is more, the committee noted that the evidence they had received "other than the evidence from Government departments, has been overwhelmingly in favour of some degree of publication".

The committee accordingly recommended that "the right course is to publish the inspector's report". The Government accepted this recommendation, among many others. It should be recalled that the *Franks' Committee* specifically added that "the complete text of the inspector's report should accompany the minister's letter of decision . . .".

When the Ministry of Housing and Local Government came to put the recommendation into practical effect, they described the procedure to be followed in *Circular 9/58*. This circular stated that the report would not accompany the decision letter, as had been recommended, but could be obtained from the ministry if application were made within one month of the date of the decision letter.

It is difficult to resist the conclusion that the ministry hoped that by requiring appellants to apply for the report and by not sending a copy with the decision letter, they would discourage the public from taking any real interest in those reports.

This background gives point and interest to a decision by the ministry, apparently taken recently, but not announced, that in future the inspector's report *will* accompany the decision letter. Certainly such a practice appears to have been adopted and it is very welcome. Not only does it now bring the *Franks' Committee* recommendation into full effect, but it appears also to have an important administrative advantage. If the decision letter is accompanied by the report, which sets out the issues at length, then the letter can be much shorter, duplication is avoided and time and effort saved. The ministry are to be congratulated on a sensible and useful step.

### Technical Standards

One of the many difficulties still faced in planning, both local and general, is the absence of sound technical standards. This difficulty applies to small matters and to large alike. One aspect which is currently being reviewed is the problem of suitable standards of play-space for children in new housing schemes. The Housing Standards Sub-Committee of the Central Housing Advisory Committee is at present taking evidence on the subject. The Minister of Housing hopes for a report "in due course".

### In Parliament

#### Brick Supply Record

More bricks were produced in the first four months of this year than in any comparable post-war period, it was stated in a written Parliamentary reply by Lord John Hope, Minister of Works.

"I believe production should increase still further in the months to come," he added, "and production of alternative materials is also high. Early ordering and flexibility of

specification will help to avoid delays, and I am always ready to investigate with the brickmakers any special difficulties" (May 31).

### Repairs and Restorations

Mr. Robert Cooke (Cons., Bristol West) asked in the Commons about the present condition of Ston Easton Park, Somerset, and whether the future of "this house of architectural interest" has been safeguarded.

Sir Keith Joseph, Parliamentary Secretary, Ministry of Housing and Local Government, replied: "The house is deteriorating, but still capable of restoration. It is protected by a building preservation order, and efforts to find a use for it are continuing."

Mr. Cooke asked the Minister of Works (Lord John Hope) what progress had been made with the restoration of Dyrham Park, Glos., at what cost and when the house would be open to the public.

The minister stated in a written reply: "Dyrham Park was purchased in 1957 for just over £5,000; repairs and other work necessary for opening the house to the public are expected to cost about £58,000. Chattels purchased with the building cost £42,252, and repairs to them £2,800.

"The total expenditure is expected to amount to some £108,000. The National Trust will take the property over in September, 1960, when work is due to be complete, and hope to open the house to the public in Easter, 1961."

The minister was also asked by Mr. Cooke when he proposed to start work on the restoration of the Treasury buildings facing Whitehall to make good the war damage.

Lord John replied: "The war damage will be repaired as part of the scheme for the reconstruction of the Treasury buildings in Whitehall, on which work is due to start in August."

In another written reply, Mr. Harmar Nicholls, Parliamentary Secretary, Ministry of Works, stated that the minister proposes to remodel the east side of Apsley House "in conformity with the architecture of the building as a whole, using Bath stone as a facing material". Work should start this summer (May 31).

### Council Housing Increase

After saying in the Commons that it was "too soon to make a reliable estimate" of the number of council houses he expects local authorities to build this year, Mr. Henry Brooke, Minister of Housing and Local Government, added that at March 31 public authorities had 119,000 houses under construction, 12,000 more than a year before.

Replying to another question, he stated: "I have taken no decision to restrict the programmes of individual local authorities to the same level as last year. My general aim is to agree programmes that are reasonable in the circumstances of the authority concerned" (May 31).

### Coming Events

#### Institution of Civil Engineers

June 15 at 7.30 p.m. *Conversazione*. At Great George Street, S.W.1.

#### Borough Polytechnic

June 15 at 2.15 p.m. The last feature in the series "Modern heating and ventilating problems for the architect". A brains trust. In the new lecture theatre, Borough Polytechnic, Borough Road, S.E.1.

#### Architects' Christian Union

June 16 at 7 p.m. (refreshments 6.30 p.m.). "The evidence of things not seen", B. J. Allen. At the Royal Institute of British Architects, 66 Portland Place, W.1.

#### The Reinforced Concrete Association

June 14 at 5 p.m. (refreshments 4.30 p.m.). Annual General Meeting. At the Institution of Structural Engineers, 11 Upper Belgrave Street, S.W.1.

#### Victoria and Albert Museum

Now until October 1. Exhibition of drawings and etchings, by Giambattista Tiepolo (1696-1770), in rooms 70-73.



Photos: VRIJHOF

## SPORT HALL, ROTTERDAM, HOLLAND

Architects: VAN DEN BROEK and BAKEMA

The sport hall is shown as a black rectangle on the site plan. Connected to it and to the west is the old hall which was already on the site and is cruciform in shape. The other pavilions shown are mainly prefabricated structures which are removed when the park is not in use as an exhibition ground

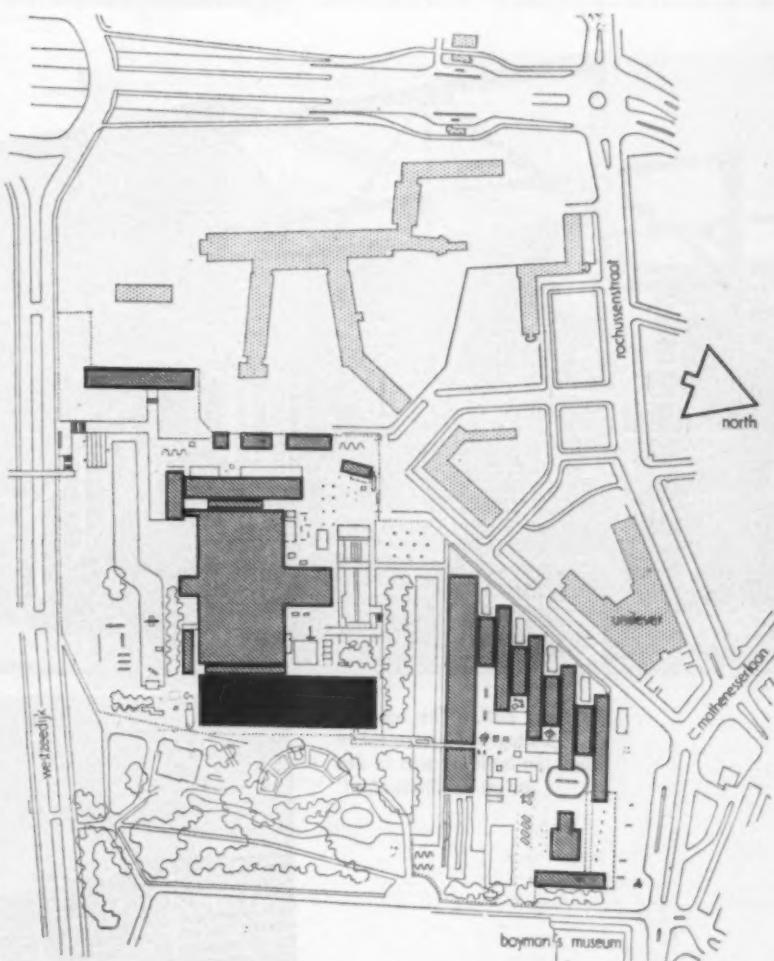
**T**HREE have been a series of large-scale exhibitions in Rotterdam since the war taking place every five years. In 1950 the subject was the growth, destruction and rebuilding of Rotterdam with particular reference to the port. This year the theme was the bulb industry.

In 1950 when the first of these big exhibitions took place, a site was chosen in a park to the east of the city centre and adjoining the port. There were two big halls already on this site, one of them a steel frame structure, cruciform in shape with a pitched roof.

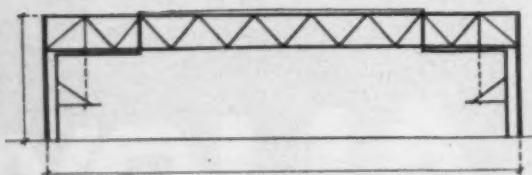
At the "Rotterdam Ahoy" exhibition of 1950, visitors entered from the city centre and left at the port end of the site. There were two main halls; one for individual exhibits from the state, commerce and industry with a restaurant attached and the other for the town of Rotterdam. The town exhibition hall was square in shape on plan.

The sport hall was originally built as an exhibition hall and then converted into a sport hall by the addition of a gallery. There is a main steel frame structure with the columns and most of the truss outside the building (see page 727). Beneath the main structure there is a steel sub-structure suspended from the main structure. The roof is of timber and the end walls of aluminium. The glazing consists of timber horizontal "bandages" fixed to the sub-structure by metal angles. The glass is held in position at the top and bottom and leads are used to form the vertical junctions between sheets of glass.

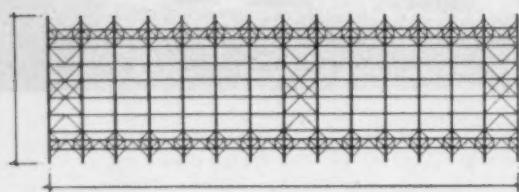
The colours used are as follows:— The steel is dark grey; the timber is white; the bricks are of concrete.



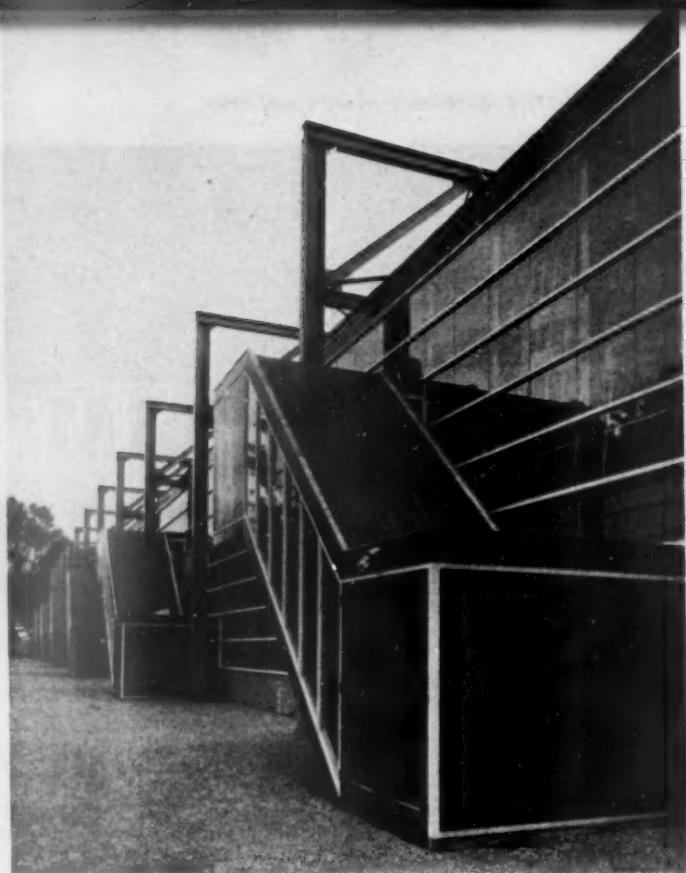
## SPORT HALL



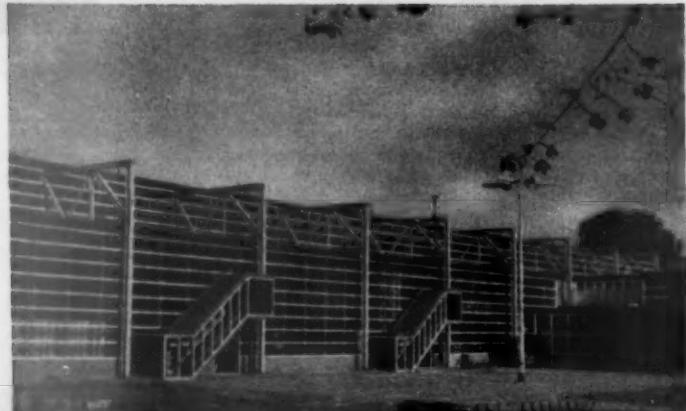
SHORT SECTION  
SCALE 1: 600.M. HEIGHT 11.M.

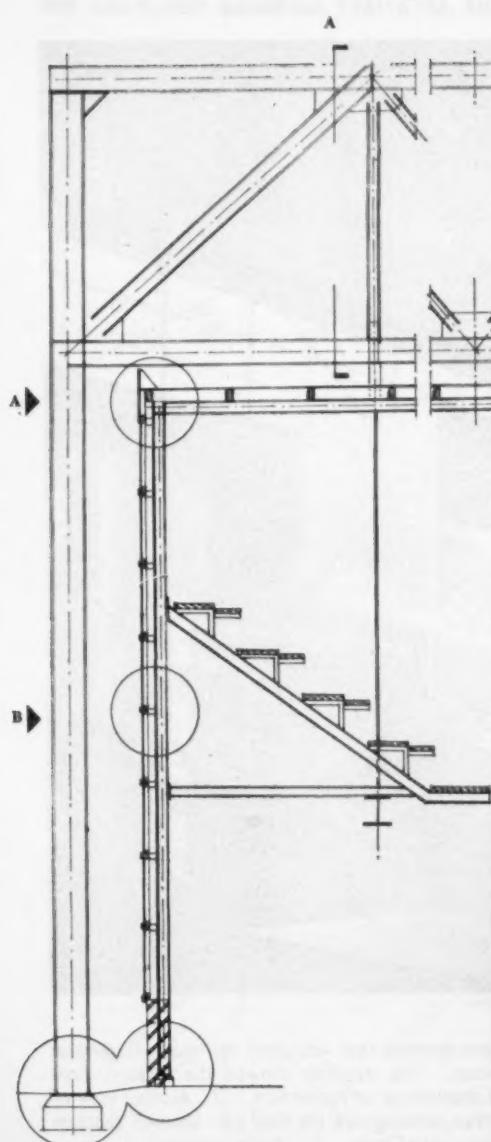


PLAN OF STRUCTURE  
LENGTH 140.M. WIDTH 42.M.

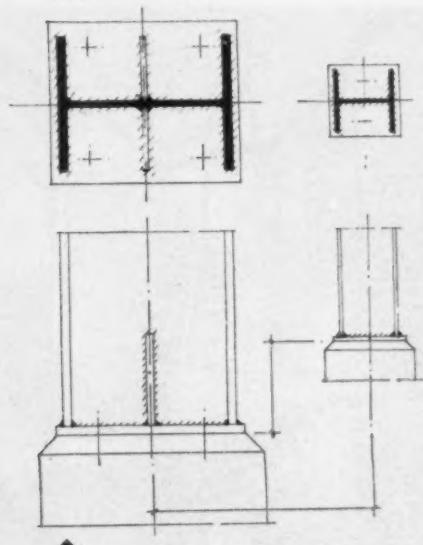


The sport hall. The top two photographs were taken when the building was in use as an exhibition hall.





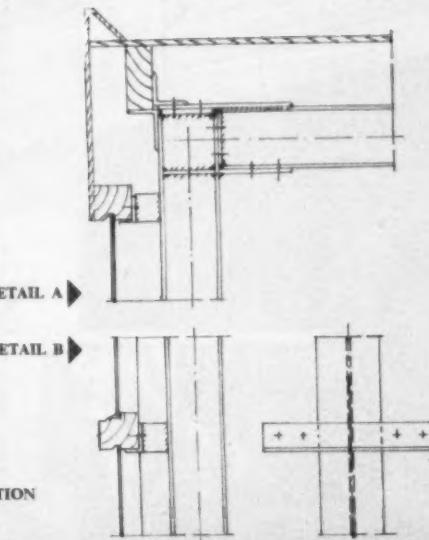
▲ C SCALE 1: 36.M.  
SHORT SECTION



DETAIL C SCALE 1: 15.M.



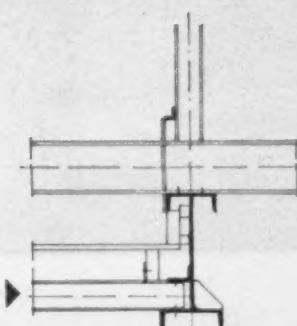
The sport hall with an exhibition on ship building in progress. The suspended gallery had not been put in when this picture was taken.



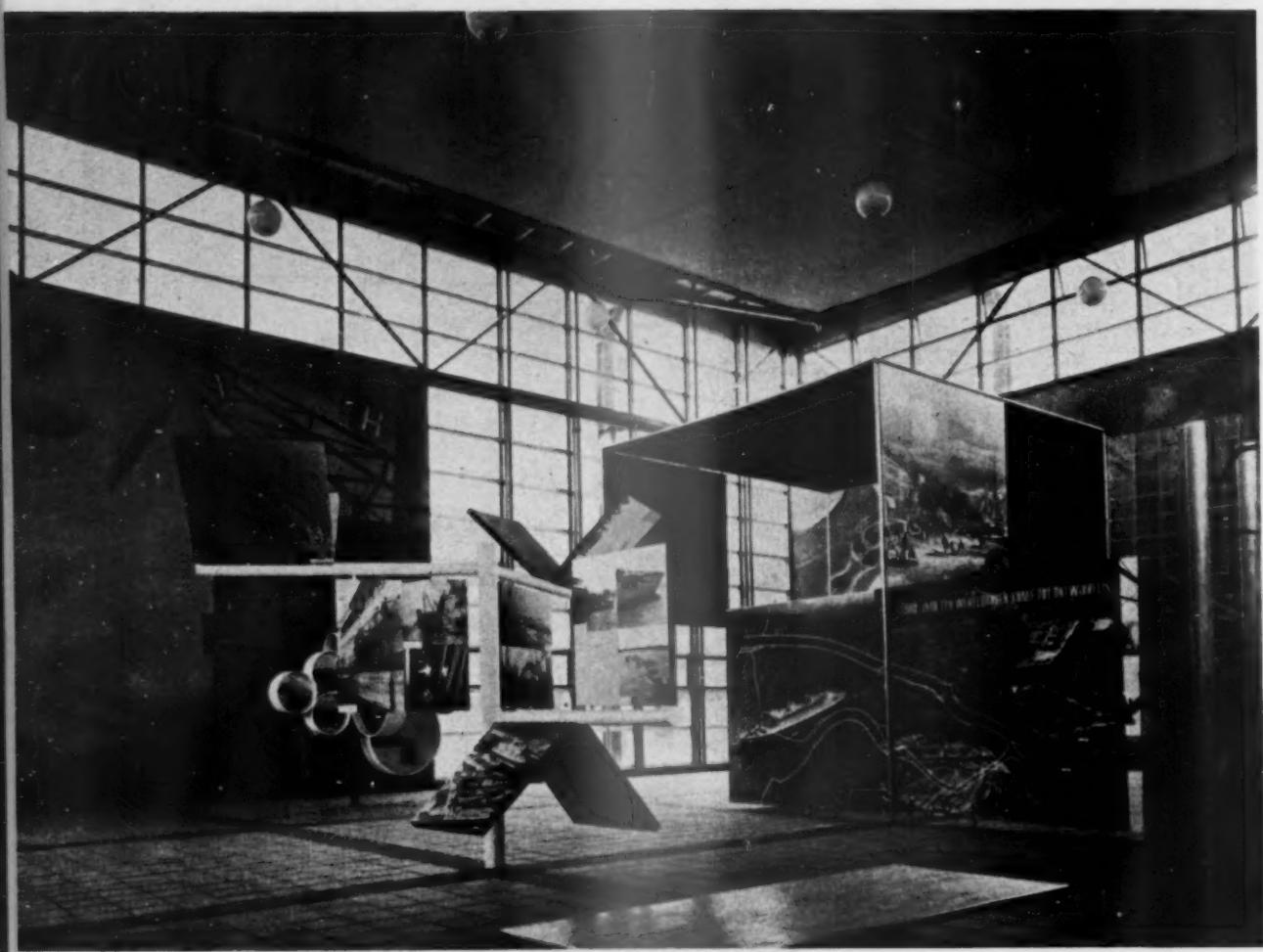
**DETAIL A**

**DETAIL B**

#### DETAIL SECTION



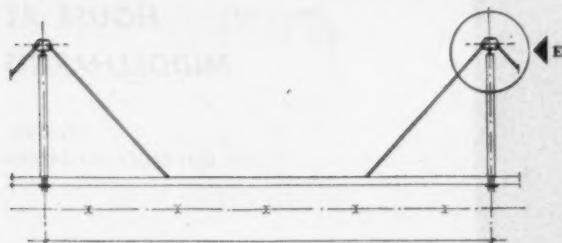
**DETAIL D**

**SPORT HALL**

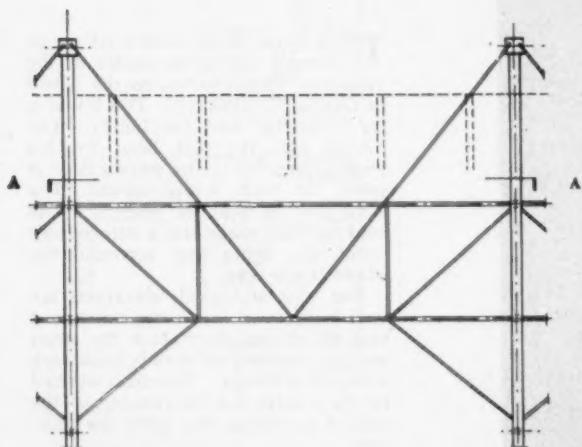
1. The square pavilion that was used for the "Rotterdam Ahoy" exhibition. The exhibits showed the history, construction and destruction of Rotterdam. 3. Another view of the same pavilion showing how the floor was lowered (bottom left) to display a relief map. 2. Trade pavilions

2



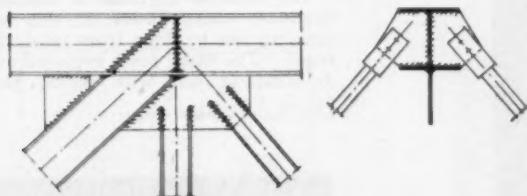


SECTION A-A ▲  
DIMENSION BETWEEN SUPPORTS: 10.M.

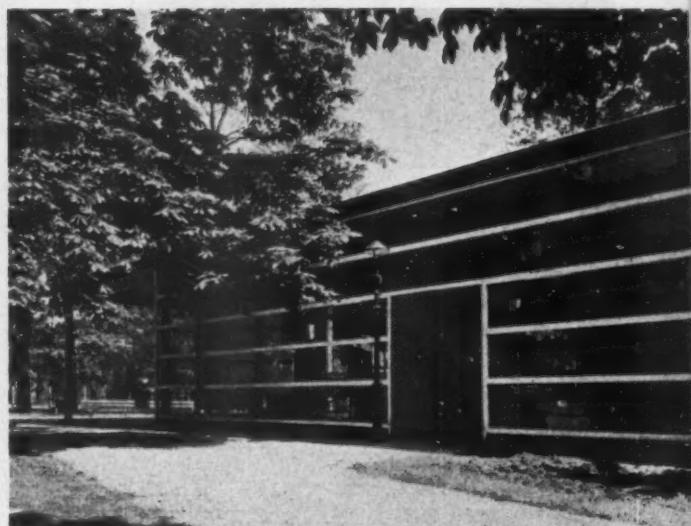
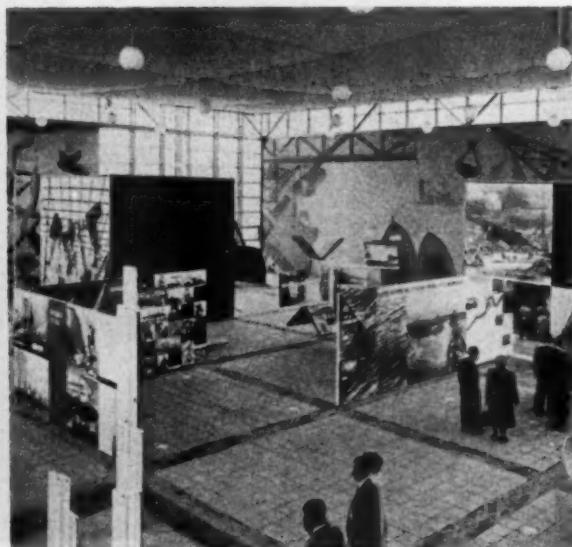


SCALE 1: 150.M. ▲  
DETAILS OF TRANSVERSE TRUSS  
SCALE 1: 15.M.

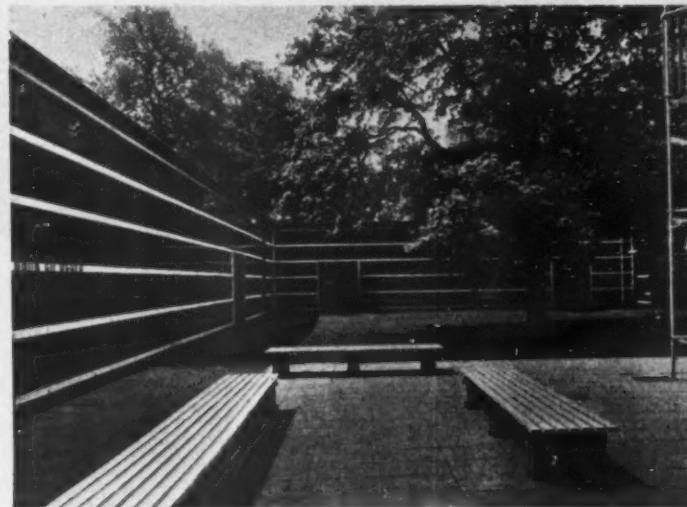
DETAIL E ▼



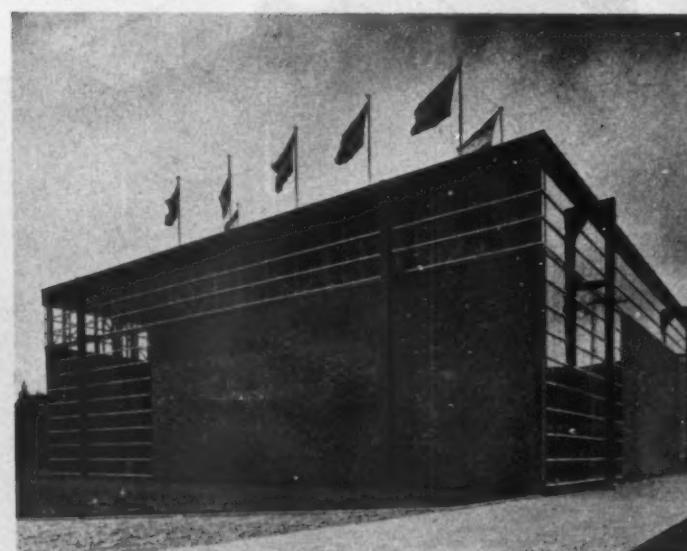
3



Trade pavilions. The glazing is set in wood frames painted white and with lead vertical glazing bars



The square pavilion





*The house from the burial ground and the street elevation (eastern face of the building)*



THE ARCHITECT and Building News,  
8 June 1960

## HOUSE AT MIDDELHARNIS

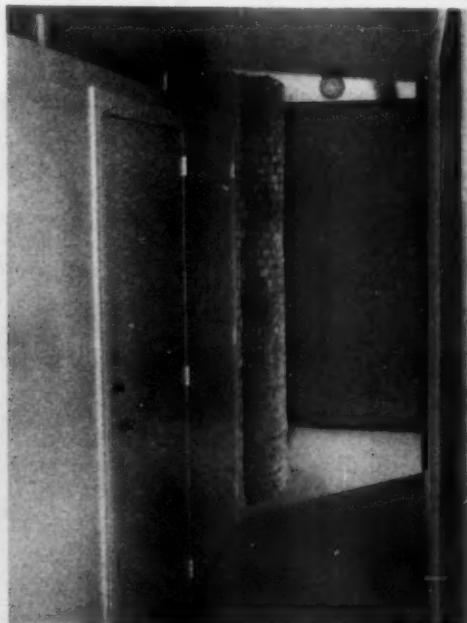
Architects :  
VAN DEN BROEK and BAKEMA

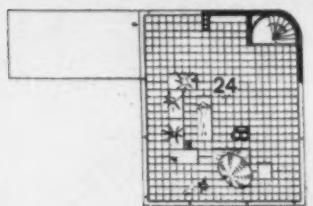
THIS house, which is of brick, is on a small site in the centre of the village of Middelharnis on the island of Goeree-Overflakkee. This house is for a doctor and his family. The doctor uses the first floor for his medical practice. The second floor is taken up with living rooms. The third floor is used for sleeping. The roof has been made into a terrace from which the dykes that surround the island can be seen.

The west and south elevations are well fenestrated while the north and east elevations which face the street and the cemetery are mainly brickwork with few openings. The main window on these sides is a slit running up the side of the house that lights the staircase.

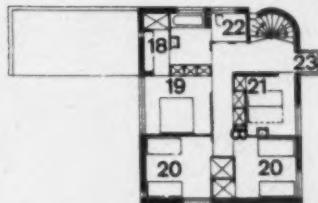
The doctor wanted an open fire. This has been placed in the centre of the living room and also runs straight up through the centre of the house.

The windows are made so that they bascule outside-inside, in this way cleaning can be done from inside the room. The living room is glazed over its southern side with sliding glass panels.

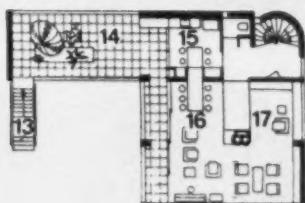




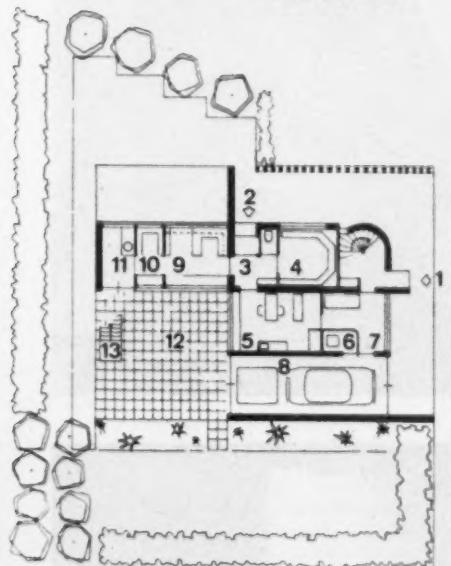
ROOF



SECOND FLOOR



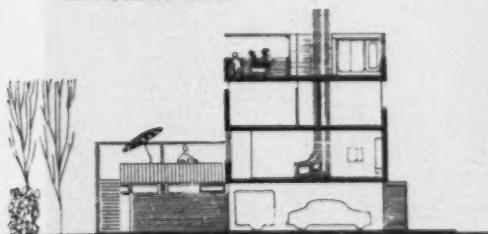
FIRST FLOOR



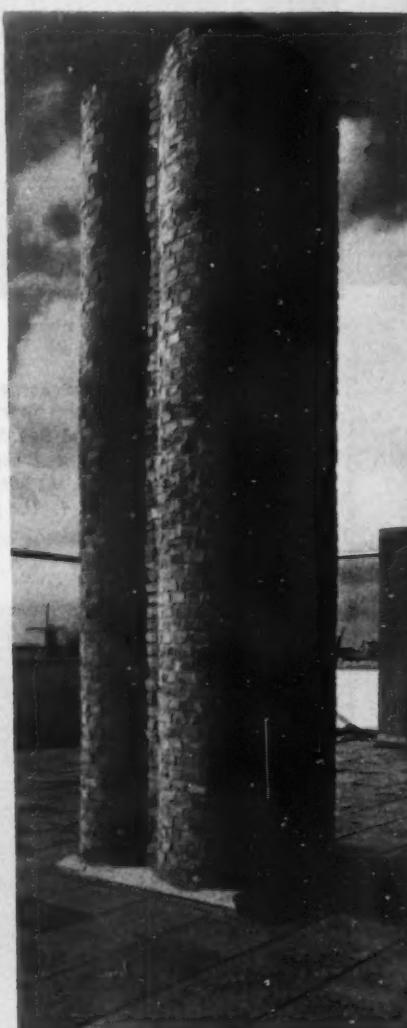
GROUND FLOOR

KEY: 1. Entrance to flat. 2. Patients' entrance. 3. Vestibule. 4. Waiting room. 5. Surgery. 6. Heating. 7. Sun lamp. 8. Garage. 9. Dispensary. 10. Store room. 11. Scullery. 12. Yard. 13. Stairs to lounge-terrace. 14. Lounge-terrace. 15. Kitchen. 16. Dining-room. 17. Lounge. 18. Cloakroom. 19. Parents' room. 20. Nursery. 21. Guests' room. 22. Showers. 23. Balcony. 24. Roof terrace.

NOTE: These plans are reproduced by kind permission of *Bauen + Wohnen*.



The northern wall of the house. The chimney that is taken straight up through the building from the living room



## MIDDELHARNIS



4



2



3





THIS building is a mews situated at the rear of a Georgian house in Fitzwilliam Place, Dublin. It was completely derelict when taken over for conversion into a dwelling house. The floor area is 1,550 sq ft on two floors.

The ceilings were covered throughout with  $\frac{1}{4}$  in deal matchboarding treated with a preservative as a finish. The walls were stripped of existing plaster and distempered white. New walling consists of Fairface concrete block and matchboarded partitions.

The rooms illustrated are the main large living areas on the first floor, and the entrance hall and staircase on the ground floor. The flooring in the living areas consists of large birch plywood squares laid in a pattern and polished. The fireplace is completely open on all sides and positioned between the sitting room and dining areas, and it consists of a metal hood and flue pipe made of sheet steel. The base of the fireplace is also of sheet steel with filing drawers to take ashes and fuel storage. The top of the base is decorated with marble chippings and plants.

The work was carried out by direct labour and the cost was approximately £1,500.

*Looking through the fireplace towards the end of the dining room*

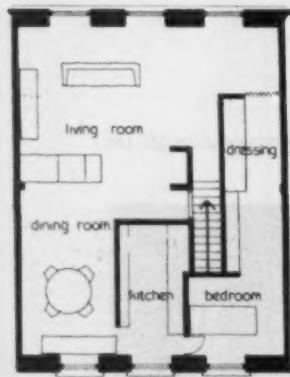
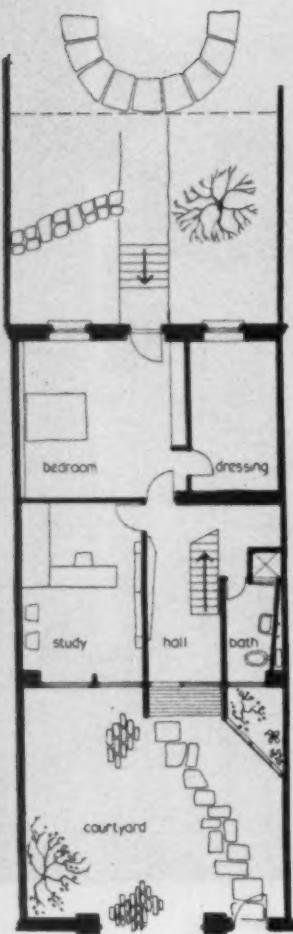
### HOUSE AT LESSON CLOSE, DUBLIN

Architect: SAM STEPHENSON

*Looking towards the far end of the dining room. The low windows overlook the garden*



## LESSON CLOSE

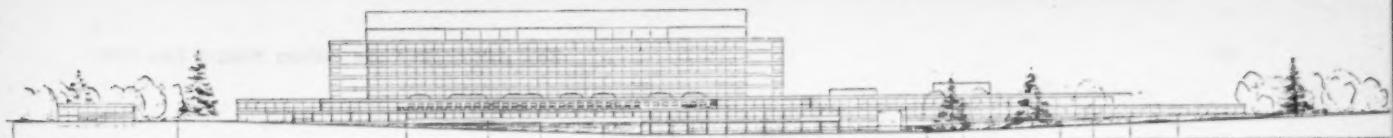


*The living room.  
On the right the  
windows that overlook  
the garden*



1. Looking from the entrance door towards the staircase and through the house to the back garden. 2. The staircase is of  $\frac{1}{2}$ in solid steel bars with  $1\frac{1}{2}$ in oregon pine treads. 3. Far end of the dining room. The entrance to the kitchen is on the left

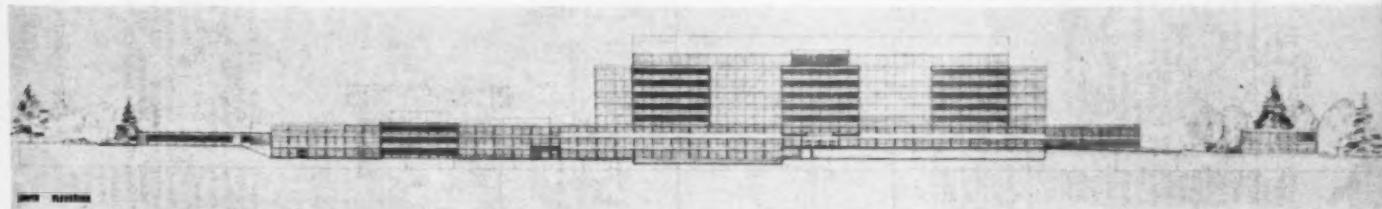




FRONT ELEVATION

## UNIVERSITY HOSPITAL OF WALES COMPETITION-II

This week we give further details of winning schemes in the competition for a new University Hospital of Wales. Explained below and on the following five pages: the design placed second by Charles B. Pearson and Son (Charles E. Pearson in association with George R. Lovell and Peter P. Lind)



FRONT ELEVATION

### Extract from the Second prize-winners report :

After a prolonged study of the Conditions the author came to the conclusion that the following main factors influenced the design.

1. The integration of a Medical and Dental School with a Teaching Hospital designed as a whole.
2. The relationship of Hospital Departments to Wards and Teaching Accommodation.
3. The circulation within the Hospital for various kinds of traffic.
4. The location of the separate Entrances to the building complex with regard to usage and accessibility.
5. Adequacy of external circulation to ensure free flow of vehicular and pedestrian traffic.
6. Disposition of Ward Units to obtain maximum sunlight and view.

The main points indicated above will now be dealt with in detail.

#### 1. The integration of a Medical and Dental School with a Teaching Hospital designed as a whole.

The author feels that this is the most important design factor as opposed to technical problems which would determine the final design of the building.

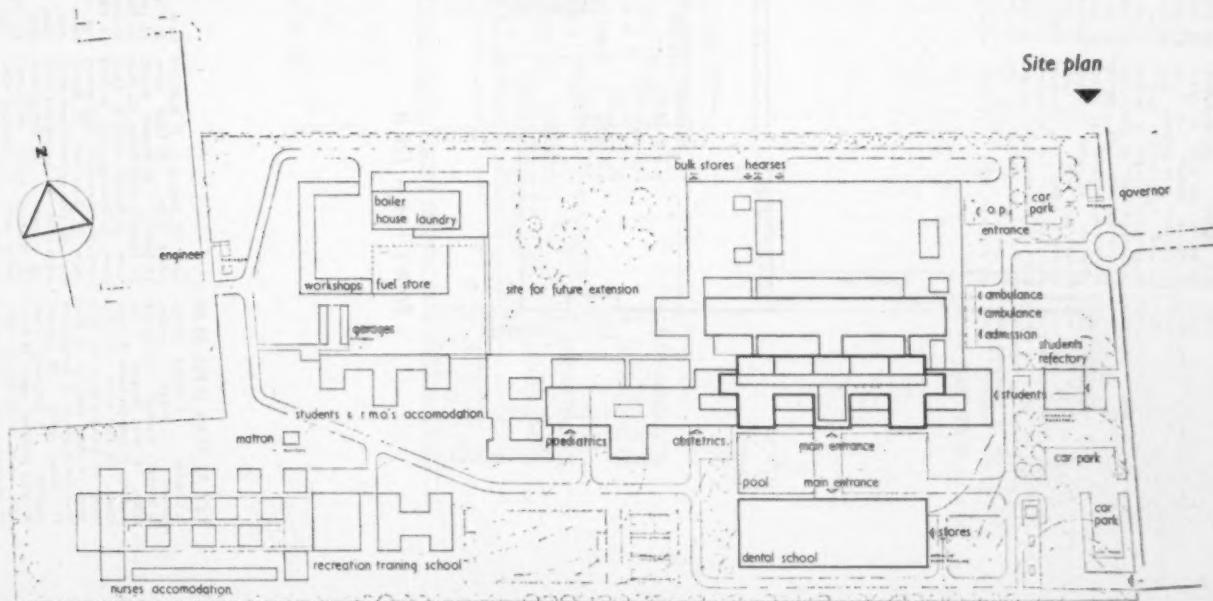
The possible solution of the problem would be to design a hospital capable of carrying out the routine functions of nursing the sick and attaching to that hospital a group of buildings which would deal with the academic and teaching requirements of a Faculty of Medicine. The author, however, felt that this was not in accordance with the comment contained in the Conditions which indicated that something more than a "physical relationship" was required between the Hospital and the Teach-

#### ing Departments.

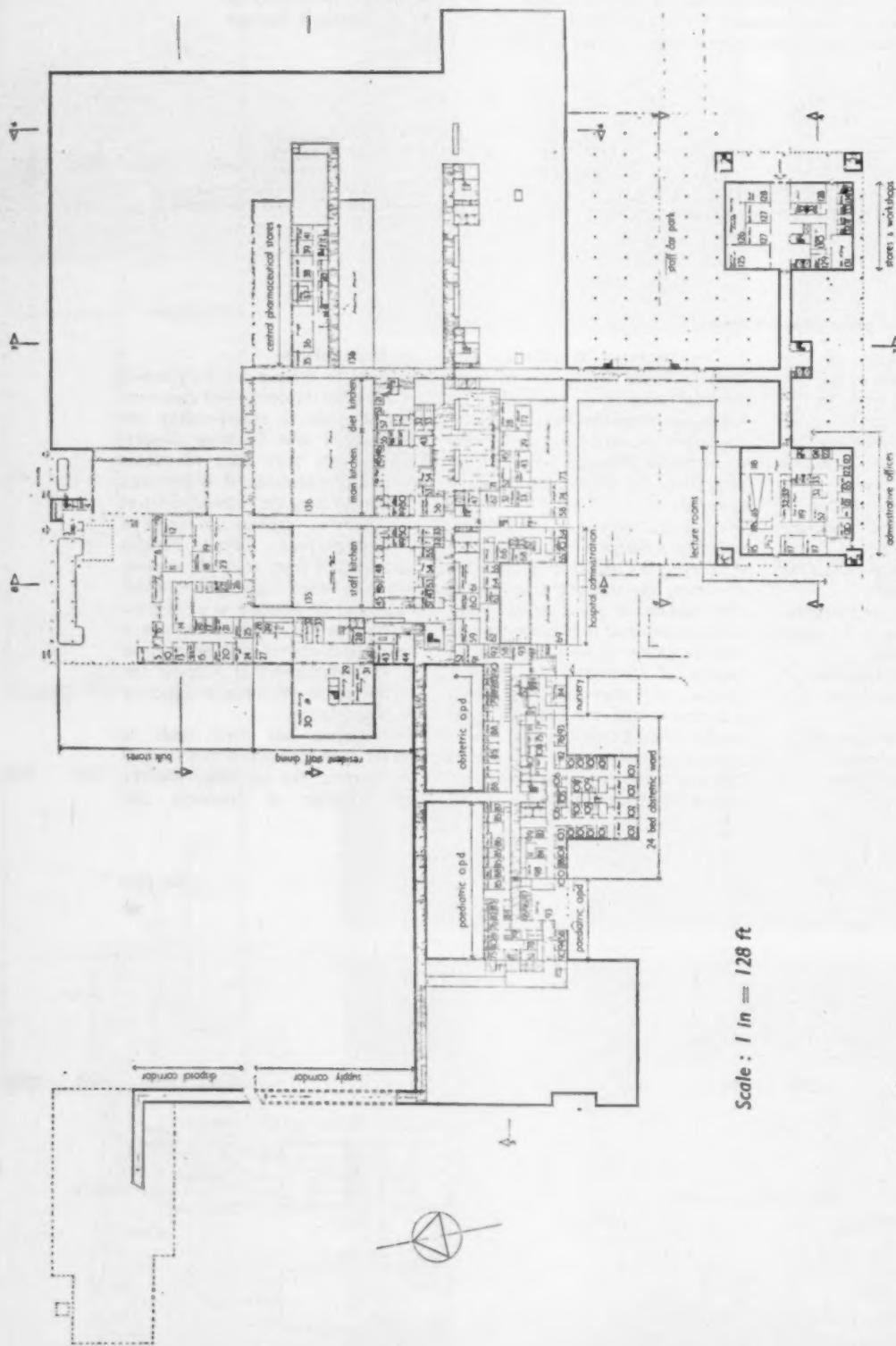
In order to achieve this very subtle relationship the design was conceived with a view to incorporating the Professorial and Teaching Departments with their own particular hospital department or Ward, etc., thus integrating the Tutorial, Clinical and Nursing aspects to create a unity of purpose. Obvious benefits would result from students working within a "ward" atmosphere, which would not be possible in a separate building which might encourage a detached academic attitude of mind.

#### 2. The relationship of Hospital Departments to Wards and Teaching Accommodation.

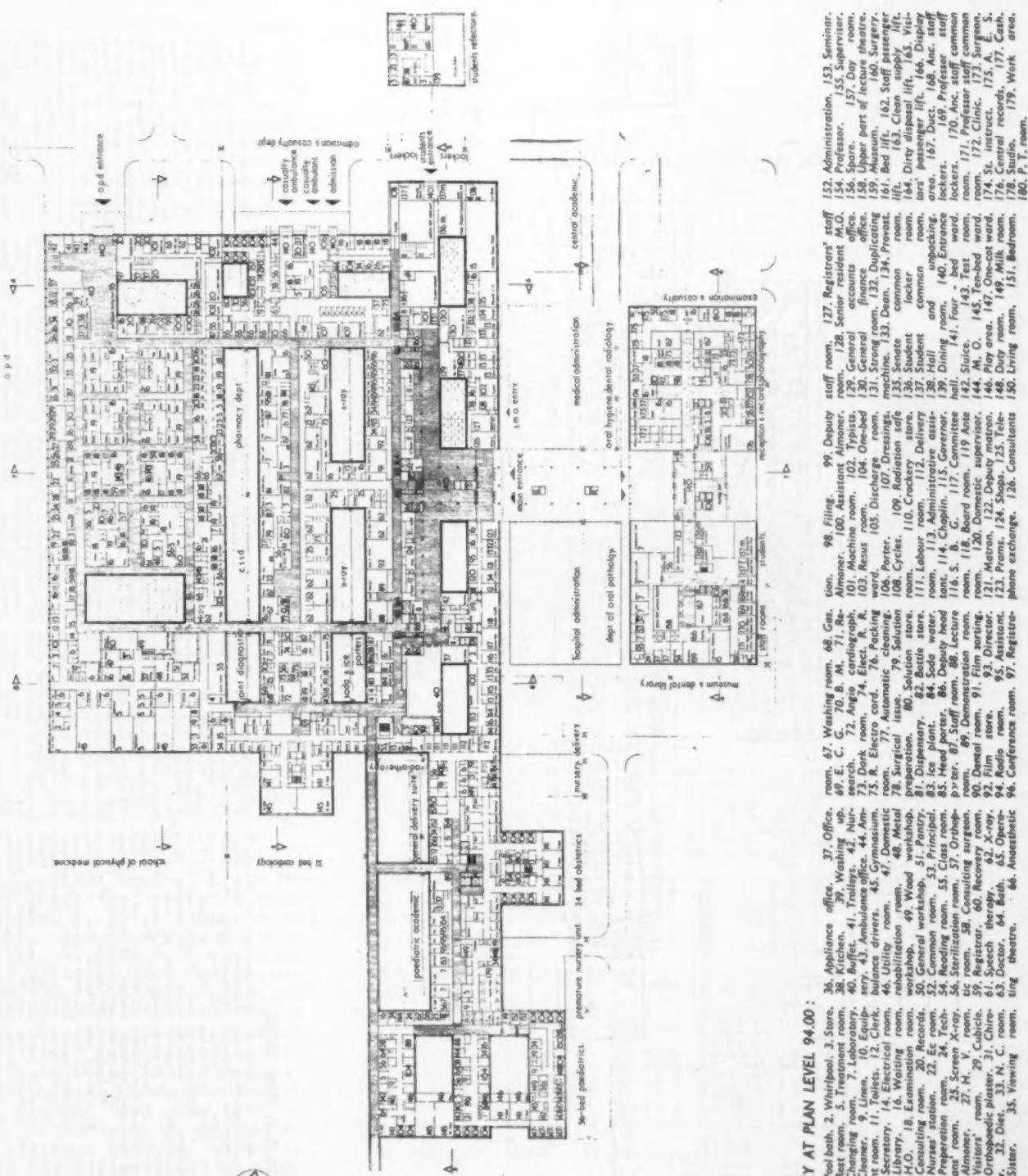
Every effort has been made to ensure that the routine functions of the Hospital are not interrupted by the insertion of Academic and



UNIVERSITY  
HOSPITAL  
OF  
WALES



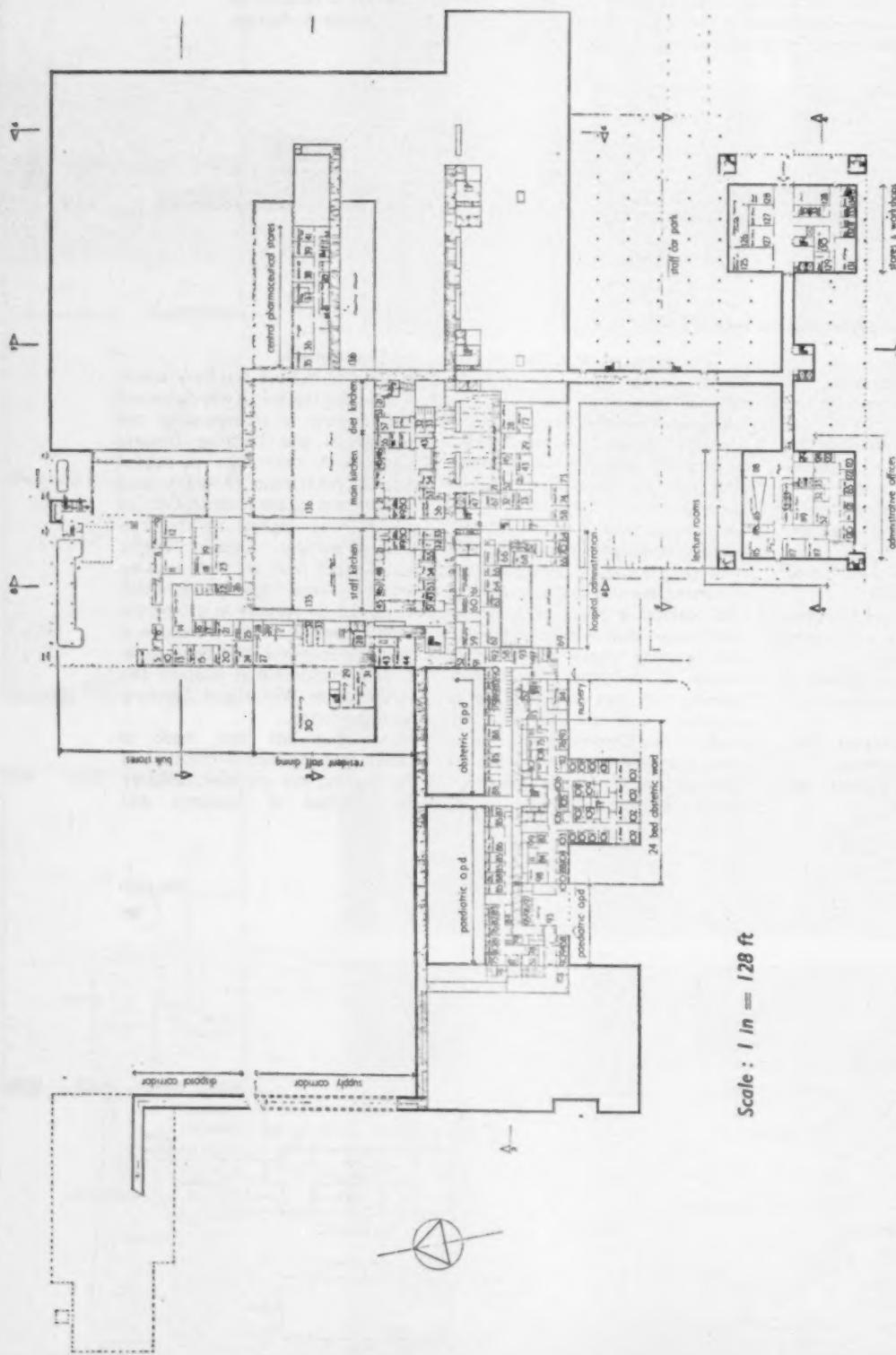
ASPECT. NORTH POINT



## KEY AT PLAN LEVEL 9400:

1. Pool bath, 2. Whirlpool, 3. Store, 36. Appliance office, 37. Office, 38. Kitchen, 39. Washup, 40. Laboratory, 41. Trusses, 42. Nurses' room, 43. Ambulance office, 44. Ambulance drivers, 45. Gymnasium, 46. Utility room, 47. Domestic room, 48. Metal workshop, 49. Wood workshop, 50. General workshop, 51. Pantry, 52. Common room, 53. Principal's room, 54. Head porter, 55. Class room, 56. Sterilisation room, 57. Orthopaedics' room, 58. Screen X-ray room, 59. Consulting surgeon's room, 60. Recovery room, 61. X-ray room, 62. X-ray, 63. Doctor, 64. Bath, 65. Operating theatre, 66. Anesthetic theatre, 67. Wash room, 68. General office, 69. E. C. G. room, 70. B. M. room, 71. Research, 72. Angle cardiograph, 73. Dark room, 74. Elect. R. R. 75. R. Electric cord, 76. Packing room, 77. Automatic cleaning room, 78. Surgical issue, 79. Solution room, 80. Solution store, 81. Dispensary, 82. Bottle store, 83. Ice plant, 84. Soda water, 85. Head porter, 86. Deputy head porter, 87. Staff room, 88. Lecture hall, 89. Demonstration room, 90. Dental room, 91. Film sorting room, 92. Film store, 93. Director, 94. Radio room, 95. Assistant, 96. Conference room, 97. Registration room, 98. Filing room, 99. Deputy staff room, 100. Assistant Almoner, 101. Machine room, 102. Typists, 103. Resus room, 104. One-bed ward, 105. Discharge room, 106. Porter, 107. Dressing machine, 108. Cycles, 109. Radiation safe room, 110. Crochet store, 111. Labour room, 112. Delivery room, 113. Administrative assistant, 114. Chaplin, 115. Convenor, 116. S. B. G. room, 117. Committee room, 118. Board room, 119. Annex room, 120. Domestic supervisor, 121. Matron, 122. Deputy matron, 123. Farms, 124. Shop, 125. Telephone exchange, 126. Consultants room, 127. Registrars' staff room, 128. Senior resident room, 129. General accounts office, 130. General finance office, 131. Strong room, 132. Duplicate machine, 133. Dean, 134. Provost, 135. Senate common room, 136. Student common room, 137. Student common room, 138. Hall and unloading area, 139. Dining room, 140. Entrance hall, 141. Four-bed ward, 142. Stuice, 143. Test room, 144. M. O. 145. Tended ward, 146. Play area, 147. One-con ward, 148. Duty room, 149. Milk room, 150. Living room, 151. Bed room, 152. Administration, 153. Seminar room, 154. Professor, 155. Supervisor, 156. Spare room, 157. Day room, 158. Upper part of lecture theatre, 159. Museum, 160. Surgery, 161. Bed lift, 162. Staff passenger lift, 163. Clean supply lift, 164. Dirty disposal lift, 165. Visitors' passenger lift, 166. Display area, 167. Duct, 168. Anc. staff room, 169. Professor staff lockers, 170. Anc. staff common lockers, 171. Professor staff common room, 172. Clinic, 173. Surgeon room, 174. S. B. G. room, 175. A. S. room, 176. Central records, 177. Cash, 178. Studies, 179. Work area, 180. P. T. room.

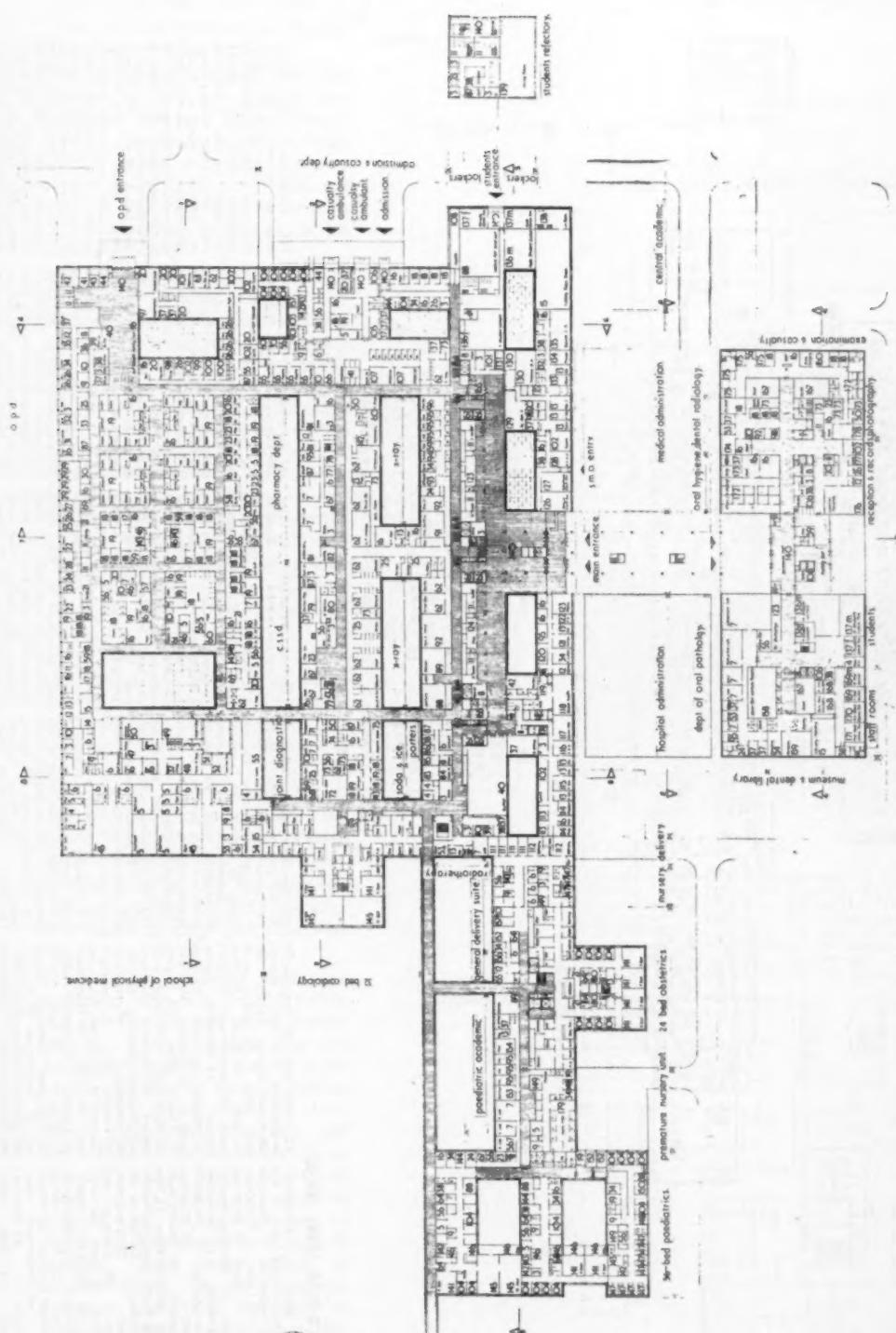
UNIVERSITY  
HOSPITAL  
OF  
WALES



Scale: 1 in = 128 ft

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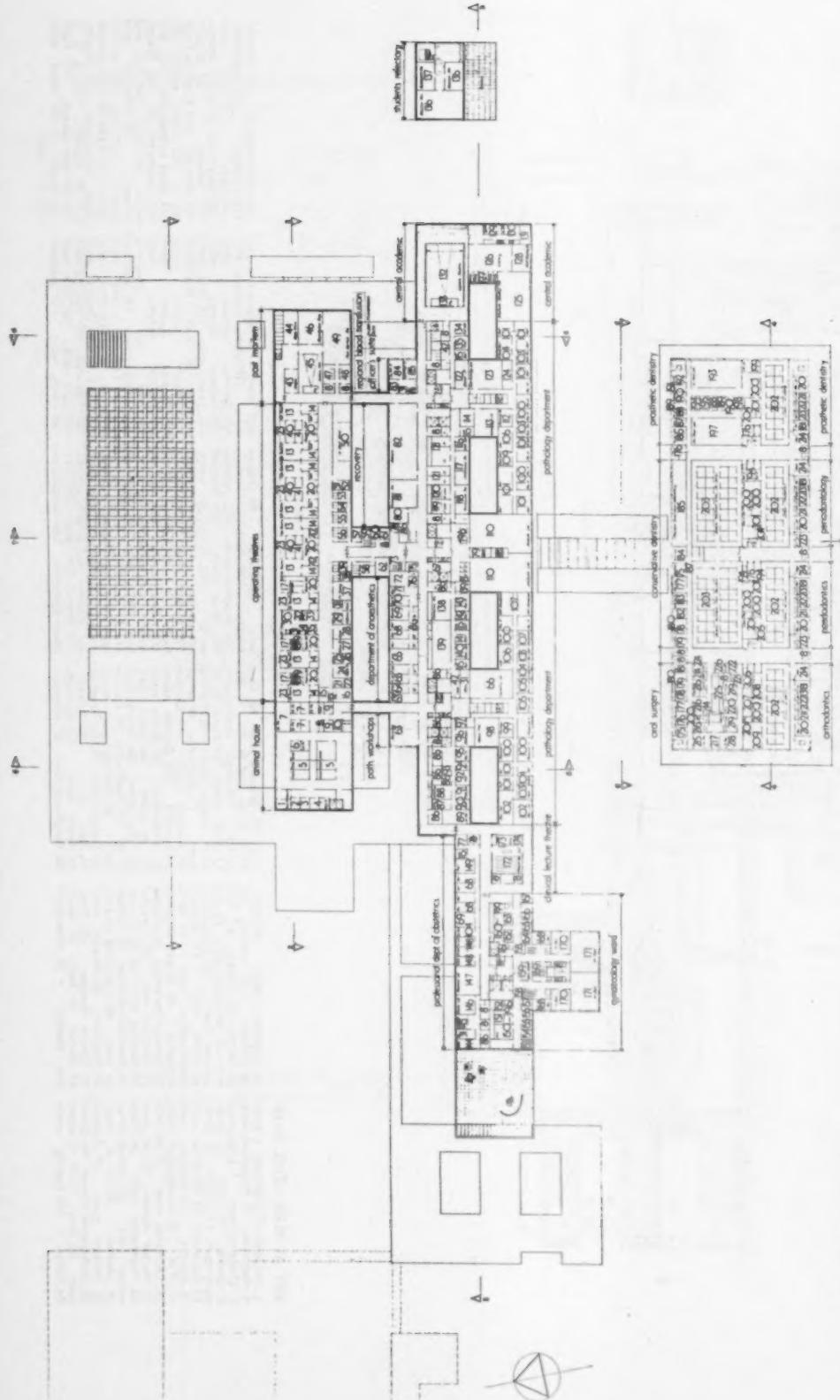
ASPECT, NORTH POINT



KEY AT PLAN LEVEL 94.00:

1. Pool bath. 2. Whirlpool. 3. Stone. 36. Appliance office. 37. Office. 38. Kitchen. 39. Laundry. 40. Trolleys. 41. Buffet. 42. Reception room. 43. Nurses station. 44. Equipment room. 45. Laundry. 46. Utility room. 47. Storage room. 48. Surgical room. 49. Ward working. 50. General workshop. 51. Dispensary. 52. Common room. 53. Principal room. 54. Reading room. 55. Gift room. 56. Sterilization room. 58. Consulting room. 59. Almshouse. 60. Recovery room. 61. Radiator room. 62. Almshouse. 63. Hospital office. 64. Office. 65. Office. 66. Conference room. 67. Viewing room. 68. Washing room. 69. Gas room. 70. B. C. G. 71. Research room. 72. Angio cardiograph. 73. Dark room. 74. Electro card. 75. Electrocardiogram. 76. Packing room. 77. Automatic cleaning machine. 78. Utility room. 79. Storage room. 80. Waiting room. 81. Examination room. 82. Consulting room. 83. Nurses station. 84. Equipment room. 85. X-ray room. 86. Radiator room. 87. Hospital office. 88. Office. 89. Conference room. 90. Dental office. 91. Film storage. 92. Film room. 93. Director's room. 94. Radio room. 95. Office. 96. Conference room. 97. Radiophone exchange. 98. Filing room. 99. Debility room. 100. Assistant Almshouse. 101. Machine room. 102. Typ. 103. Reuse room. 104. One-bed room. 105. Discharge room. 106. Porter's room. 107. Dressings room. 108. Cycles. 109. Radiation safe common room. 110. Crockery store. 111. Laundry room. 112. Delivery Hall and stairs. 113. Determinative laboratory. 114. Chapel. 115. Gymnasium. 116. S. G. 117. Committee room. 118. Board room. 119. Attic room. 120. Domestic supervisor's room. 121. Matron. 122. Deputy matron. 123. Patients' room. 124. Shoes. 125. Telephone exchange. 126. Consultants room. 127. Radiostaff room. 128. Senior resident room. 129. General office. 130. General finance office. 131. Strong room. 132. Duplicating machine. 133. Dean's room. 134. Provost's room. 135. Senate common room. 136. Student room. 137. Hall and stairs. 138. Dining room. 139. Dining room. 140. Entrance hall. 141. Four-bed room. 142. Six-bed room. 143. Ten-bed room. 144. M. O. 145. Technical supervisor's room. 146. Play area. 147. One-cut ward. 148. Daily room. 149. Daily room. 150. Daily room. 151. Daily room. 152. Administration staff room. 153. Seminar room. 154. Professor's room. 155. Day room. 156. Spore office. 157. Upper part of lecture theatre. 158. Museum. 159. Library. 160. Surgery room. 161. Bed 161. Staff passenger room. 162. Clean supply lift. 163. Disposal lift. 165. Visitors' passenger lift. 166. Display area. 167. Diet. 168. Anc. staff lockers. 169. Professor's room. 170. Anc. staff common room. 171. Professor's room. 172. Clinic. 173. St. George's room. 174. One-cut ward. 175. A. C. S. 176. Matron's room. 177. Cash room. 178. Studio. 179. Work room. 180. P. T. room.

## UNIVERSITY HOSPITAL OF WALES



## KEY TO PLAN LEVEL 106.00:

- Food store.
- Equipment.
2. Equipment.
45. Lecture hall.
46. Post-mortem
- cal
47. Male change.
48. Female change.
49. Post-mortem
50. 12-bed ward.
51. Staff.
52. Staff.
53. Male
54. Female
55. Male
56. Additional
57. Nurses' rest room.
58. Male
59. Nurses.
60. Sister.
61. Scrub-up.
62. Surgery.
63. Theatre office.
64. Chief technician.
65. Research laboratory.
66. Chemistry laboratory.
67. Lifts.
68. Assistant.
69. General office.
70. Head of department.
71. Seminar.
72. Head of department.
73. Trolley
74. Porter.
75. Dark room.
76. Pantry.
77. General
78. Cold
79. Cold
80. Emergency
81. Technicians.
82. Radiant blood transfusion office.
83. Waiting
84. Body
85. Oxygen tent store.
86. Store.
87. Centrifuge.
88. Clinical bacteriology.
89. Post-mortem
90. Staff.
91. Professor's laboratory.
92. Post-mortem room.
93. Cubicle.
94. Secretary.
95. General office.
96. Incubator room.
97. Preparation room.
98. Medium preparation.
99. Sterilizer.
100. Research workers.
101. Assistant.
102. Main laboratory.
103. Technical
104. Chief technician.
105. Virus laboratory.
106. Laboratory.
107. Assistant.
108. Research workers.
109. Seminar.
110. Students' laboratory.
111. Nurses' station.
112. Cleaning room.
113. Hematology laboratory.
114. Blood bank.
115. Secretary.
116. Head of department.
117. Conference room.
118. Technicians' room.
119. Female lockers.
120. Male lockers.
121. Store.
122. Special store.
123. Path. histology laboratory.
124. Students' general store.
125. Students' reading room.
126. Library.
127. Studies.
128. Staff reading room.
129. Trolley.
130. Assistant room.
131. Library.
132. Lecture theatre.
133. Projection room.
134. Professor's laboratory.
135. Professor's common room.
136. Common room.
137. Reading room.
138. Terrace.
139. Reception.
140. Head of department.
141. Staff.
142. Steward.
143. General office.
144. Workshop.
145. Dark room.
146. Clinical room.
147. Research laboratory.
148. Research laboratory.
149. Professor.
150. Demonstrator.
151. Equipment.
152. Utility room.
153. Consultant.
154. Clerk.
155. M.O.
156. Day room.
157. Male lockers.
158. Trolley bay.
159. Ward.
160. Supplies dispensing.
161. Dirty kitchen.
162. Test.
163. Treatment line.
164. Female locker.
165. Day room.
166. Sister.
167. Duty.
168. One-bed bedroom.
169. Bathroom.
170. Four-bed ward.
171. One-bed bedroom.
172. Clinical lecture hall.
173. Patients' waiting room.
174. Stores.
175. Sister.
176. Stores.
177. Research laboratory.
178. Head of department.
179. Head of department.
180. Plaster.
181. Practical instruction laboratory.
182. Head of department.
183. Assistant.
184. Head of department.
185. Demonstration laboratory.
186. Head room laboratory.
187. Casting
188. Processing
189. Plaster area.
190. M.A.S.
191. Laboratory office.
192. M.A.S.
193. Junior students' laboratory.
194. Supplies dispensing.
195. Casting.
196. Cubicle.
197. Student laboratory.
198. Equipment.
199. Dental materials laboratory.
200. Steri-lizer.
201. Demonstration surgery.
202. Clinic (14 chairs).
203. General treatment clinic.
204. Model storage.
205. Dark room.
206. Current model storage.
207. Current model storage.
208. Plaster.
209. Student practical instruction laboratory.
210. Research laboratory.
211. Head of department.
212. Technical staff.
213. Assistant technical staff.
214. Department office.
215. Local anaesthesia endotracheal recovery.
216. Anesthesia endotracheal recovery.
217. Nurses' station.
218. General anaesthesia endotracheal recovery.
219. General anaesthesia endotracheal recovery.
220. Scrub-up.
221. Gas cylinder store.
222. Anesthesia office.
223. Toilet.
224. Dining and furnace area.
225. Male lockers.
226. Scrub-up.
227. Future development.
228. Equipment.
229. Linen.
230. Clean-up and preparation.
231. Store.
232. Autoclave.
233. Sterilizing.
234. Medicines.
235. Instruments.
236. Supplies.
237. T.V. viewing.
238. Conference room.
239. Female laboratory.
240. Preparation room.
241. Scrub-up.
242. Waiting.
243. Chapel.
244. Body store.
245. Oxygen tent store.
246. Mechanic's store.
247. Test.
248. Treatment line.
249. Senior student laboratory.
250. Pre-extraction prophylaxis.

## Architects Report continued :

Teaching Facilities within the main hospital building. A detail analysis of the juxtaposition of wards and hospital departments and their relationship to Teaching Accommodation will be given later in the report.

3. The circulation within the Hospital for various kinds of traffic.

The circulation pattern of any hospital is complex but in this particular case it is further complicated by the addition of student traffic and it would seem an important consideration that this influx of traffic be so arranged as to cause as little disturbance as possible to the General Hospital.

The Hospital has therefore been designed to encompass several different levels of circulation. For instance the lowest level of all would be used solely for Engineering Services and disposal. The use of the disposal corridor and lifts would mean that dirty and infected articles could be collected and disposed of by incineration or other means without having to cross "clean" areas. This principle has been incorporated in the design as far as practicable.

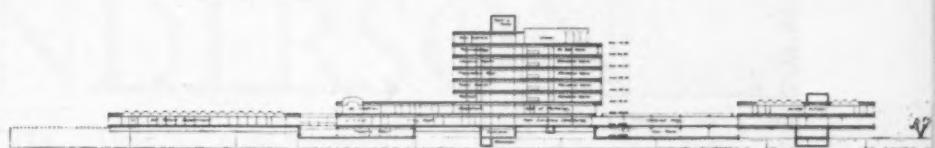
The next level of circulation allows for the general receipt of goods and stores and all catering and Staff Dining.

On the next level are all Main Entrances to the Hospital, including Out-Patients, Casualty, Admission, Staff, Students, Visitors, but are so arranged and segregated as to avoid cross traffic.

Further levels of circulation are all clinical and accommodate the Wards, Operating Theatres, Pathology Department, etc.

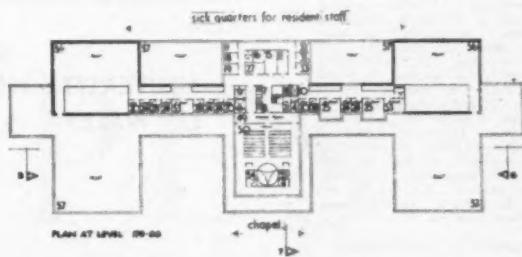
4. The location of the separate Entrances to the building complex with regard to usage and accessibility.

The External Entrances have been positioned with due thought to the site and the external access points thereto. It is considered that the access to the site from Cardiff to the East is by far the most important and all Patient Entrances, i.e. Out-Patient Department, Casualty, and Admissions, are positioned nearest to the site access from Allensbank Road. It is also felt that until the problem of accommodation of Students within the Hospital site is resolved, the main influx of students would also be from this direction and their entrance is situated between the Patient Entrance and the Main Hospital Entrance.



Section 7 ▲

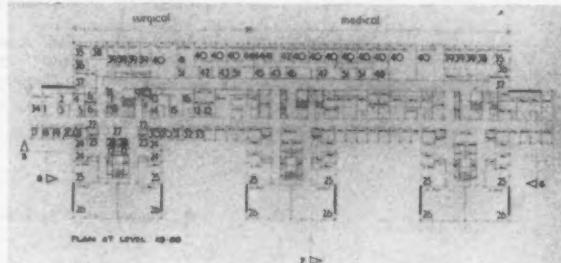
Plan level 178.0 ▶



KEY TO PLANS LEVEL 118.0 AND 178.0 :

1. Demonstration room.
2. Equipment room.
3. Linen room.
4. Utility room.
5. Cleaner.
6. Bed lift.
7. Staff passenger lift.
8. Visitors' passenger lift.
9. Clean supply lift.
10. Dirty disposal lift.
11. Dirty linen.
12. Toilet.
13. Sluice room.
14. Test room.
15. Treatment room.
16. Sterilization room.
17. Consultant.
18. Clerk.
19. M.O.
20. Day room.
21. Male lockers.
22. Trolley bay.
23. Nurses' station.
24. One-bed ward.
25. Four-bed ward.
26. 10-bed ward.
27. Kitchen.
28. Bathroom.
29. Telephone.
30. Female lockers.
31. Sister.
32. Waiting room.
33. Duty room.
34. Spare.
35. Professor.
36. Secretary.
37. Seminar room.
38. General office.
39. Assistant.
40. Laboratory.
41. Workshop.
42. Preparation room.
43. Dark room.
44. Technician.
45. Balance.
46. Spect. room.
47. Spect. appliance room.
48. Mobile X-ray.
49. Chapel/oyer.
50. Nave.
51. Stove.
52. Pantry.
53. Two-bed ward.
54. Vestry.
55. Sacristy.
56. Plant.
57. Roof.

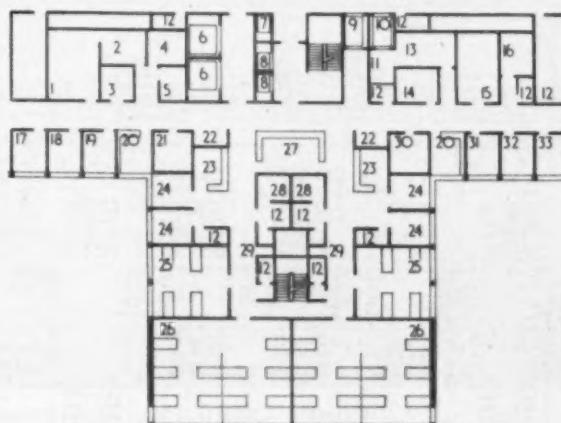
Plan level 118.0 ▶

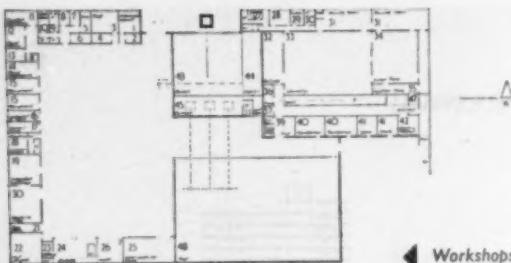


KEY TO TYPICAL WARD PLAN :

1. Demonstration room.
2. Equipment room.
3. Linen room.
4. Utility room.
5. Cleaner.
6. Bed lift.
7. Staff passenger lift.
8. Visitors' passenger lift.
9. Clean supply lift.
10. Dirty disposal lift.
11. Dirty linen.
12. Toilet.
13. Sluice room.
14. Test room.
15. Treatment room.
16. Sterilization room.
17. Consultant.
18. Clerk.
19. M.O.
20. Day room.
21. Male lockers.
22. Trolley bay.
23. Nurses' station.
24. One-bed ward.
25. Four-bed ward.
26. 10-bed ward.
27. Kitchen.
28. Bathroom.
29. Telephone.
30. Female lockers.
31. Sister.
32. Waiting room.
33. Duty room.

Typical Ward ▶





Workshops, boiler house and laundry

## KEY TO WORKSHOPS ETC:

1. Inflammable liquids.
2. Storekeeper.
3. Staff.
4. Toilets.
5. Engineer.
6. General office.
7. Department engineer.
8. Assistant clerk of works.
10. Drawing office.
11. Painters' workshop.
12. Paint spraying.
13. Glass cutting.
14. Plant scaffolding.
15. Equipment.
16. Labourers and tools.
17. Cement store.
18. Electrician.
19. Carpenters' workshop.
20. Machine shop.
21. Pipe store.
22. Millwrights.
23. Workshops.
24. Garage.
25. Open lock-up yard.
26. Car wash.
27. Store room.
28. Reception.
29. Supervisor.
30. Store.
31. Sewing room.
32. Sorting room.
33. Laundry.
34. Linen store.
35. Mattress store.
36. Incinerator.
37. Dirty washing.
38. Bio sterilizer.
39. Swift.
40. Transformer.
41. Spare.
42. Electric trolleys.
43. Boilers.
44. Calorifiers.
45. Bunkers.
46. Mess room.
47. Disinfectant room.
48. Fuel.

## KEY TO STUDENTS' ACCOMMODATION:

1. Bed.
2. Boxes.
3. Cleaner.
4. Linen store.
5. Kitchen.
6. Bath.
7. Toilets.
8. Sitting room.
9. Recreation room.

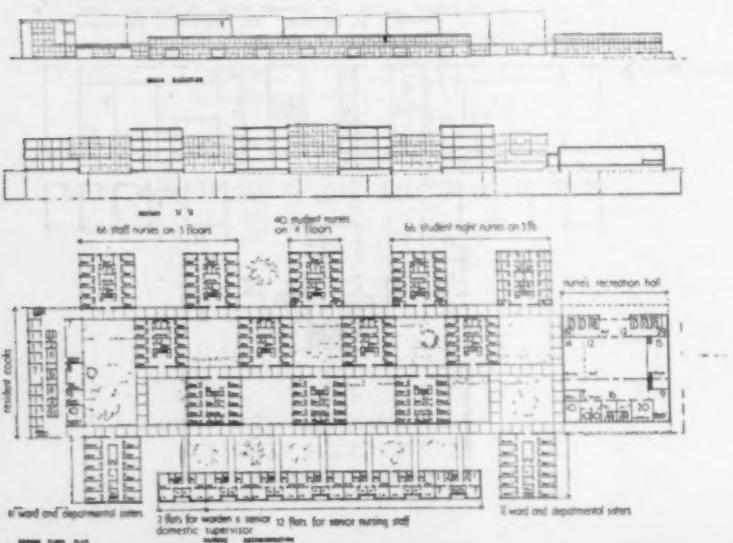
## UNIVERSITY HOSPITAL OF WALES

## Costs:

	£
Main block ...	5,642,468 0 0
Dental school ...	812,132 0 0
Students' refectory ...	47,135 0 0
Resident M.O.'s accommodation ...	111,204 0 0
Nurses' residential accommodation ...	501,877 0 0
Nurses' teaching accommodation ...	68,730 0 0
Power house and laundry including boilers, laundry equipment and chimney ...	244,237 0 0
Staff houses ...	14,300 0 0
Site works ...	240,000 0 0
	7,682,083 0 0

Student and R.M.O. accommodation

Nurses' accommodation



The Main Entrance to the Hospital which will receive all visitors and staff with the exception of Medical Staff and Medical Administrative Staff is located in a central position convenient to the Wards above. The Entrance to the Dental School is planned immediately opposite the Entrance to the Main Hospital Block for the sake of convenience for Staff and Students.

The Goods Receipt Entrance is arranged at the rear of the Main Hospital Block in order that goods traffic unloading can do so without impeding other hospital traffic.

It is considered that the other Entrance into the site on the Western side is not so important and that the traffic would be relatively light but access can be obtained to all parts of the Hospital from the Ring Road. 5. Adequacy of external circulation to ensure free flow of vehicular and pedestrian traffic.

The principal entrance in the South East Corner of the site from Allensbank Road is controlled from the Lodge and Enquiry Office and adequate arrangements have been made in the Site Layout for Visitors' Car Parks. These Car Parks are positioned away from the Ring Road which encompasses the Main Hospital Buildings.

The entry points into the Main Hospital Buildings are from the Ring Road and adequate facilities have been arranged for vehicles to drive up to all entrances and stand whilst discharging passengers or patients without interrupting traffic on the Ring Road. It is also appreciated that the staff establishment of the Hospital would be large and that there would be a large proportion of vehicles used by the staff standing about the Hospital Grounds for a considerable part of the day. To prevent the staff vehicles becoming a nuisance, physically and aesthetically, it is proposed that all staff cars are accommodated in an underground Car Park situated below the forecourt to the Main Entrance with easy access into the Hospital itself.

6. Disposition of Ward Units to obtain maximum sunlight and view. The areas surrounding the site are not particularly pleasant and the best aspect would appear to be to the North which would not give the best orientation for the Wards.

The Wards, therefore, have been set back into the site as far as possible in order that they obtain the best aspect of an environment created within the hospital site and at the same time enjoy the maximum benefits of some of the sunshine.

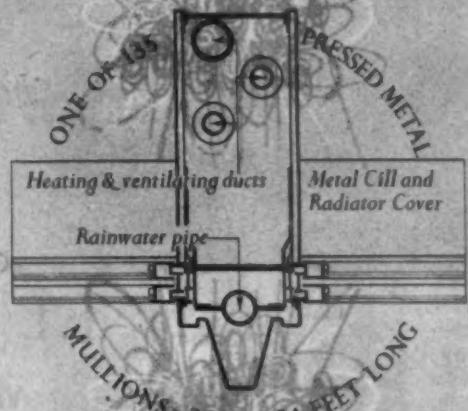
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Slater and Uriel, F.R.I.B.A., Architects

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with aluminium double hung sliding sash



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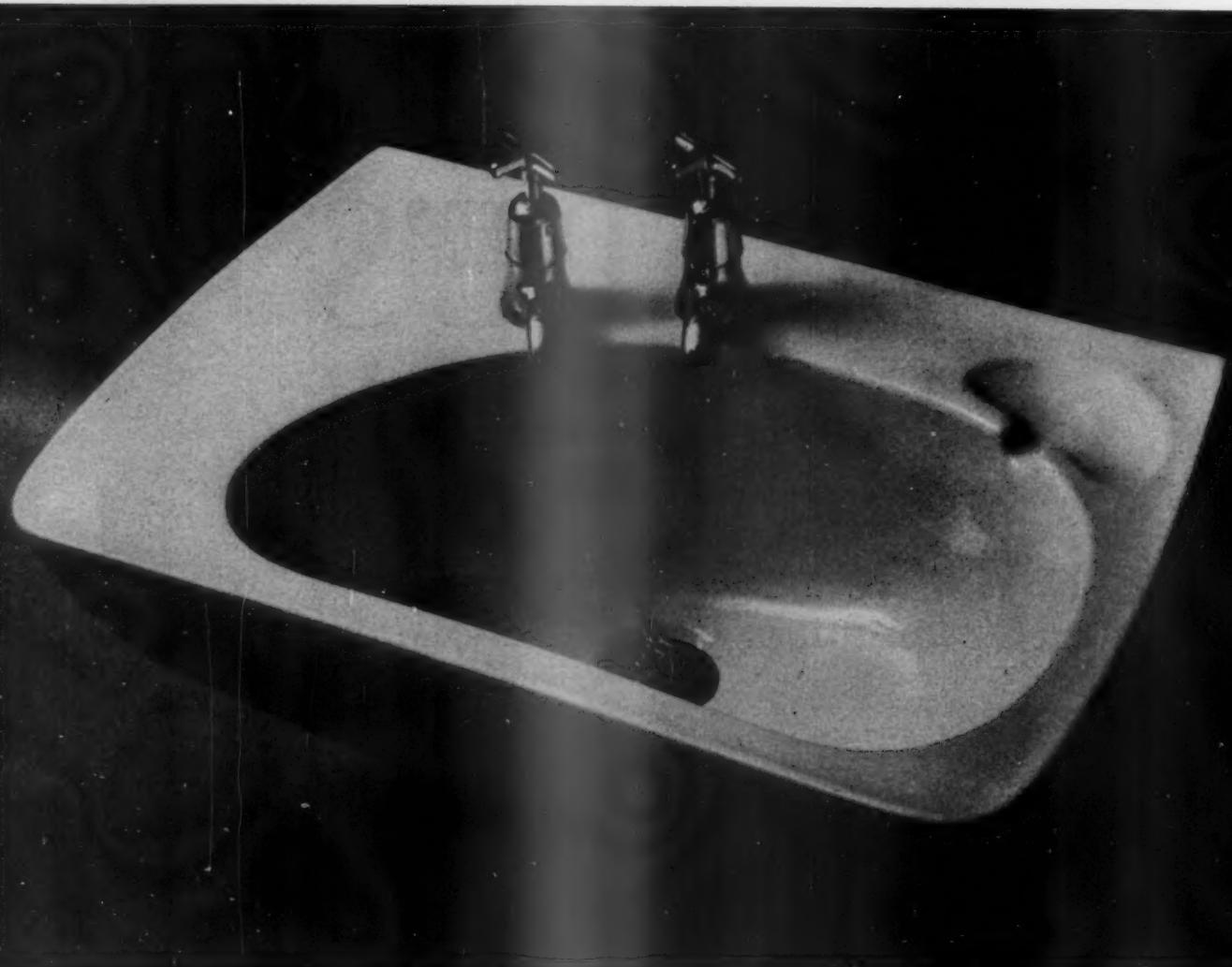
BACKGROUND BASED ON SANDERSON FABRIC DESIGN H346/1

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## Industrial Notes

● The Building and Public Works Exhibition will run from June 15 to 25. It is being held at Lambton Park, Chester-le-Street, Co. Durham and will occupy an area of over 700,000 sq ft with more than 100 stands. The site is the Durham Agricultural Show Ground which is near the main A1 Newcastle to Durham road.

● Bell's Asbestos and Engineering (Holdings) Ltd. show a group net profit for 1959 of £311,067, compared with the previous year's result of £304,761. A final ordinary dividend of 12½ per cent has been proposed, making a total distribution of 20 per cent for the year.

● George Wimpey & Co. Ltd. show a net profit for 1959 of £1,510,928, compared with the previous year's result of £1,168,028. An ordinary dividend of 10 per cent is to be paid. Viscount Marchwood has been appointed to the board of directors in the place of Mr. T. A. Mitchell who has retired.

● The British Xylonite Co. Ltd. show a group net profit for 1959 of £739,635, compared with the previous year's result of £480,877. The dividend has been increased by 5 per cent to 20 per cent.

● The Automatic Telephone & Electric Co. Ltd. show a group net profit of £1,075,186 for 1959, compared with the 1958 result of £1,028,508.

A final ordinary dividend of 12 per cent is to be paid making a total distribution for the year of 17 per cent.

● J. Brockhouse & Co. Ltd. have raised their interim dividend from 3 per cent to 4 per cent for the year to September 30, 1960. Estimated profits before tax for the half-year to March 31 have risen from £368,545 to £544,874.

● Mr. S. R. Hogg, the chairman of Williams & Williams Ltd., has disclosed that they have obtained a bank loan of £500,000 to help put the company on its feet. In making this disclosure Mr. Hogg stated that there was no cause for alarm or anxiety and that no one need have any feeling of insecurity.

● Simms Motor & Electronics Ltd. show a group net profit for 1959 of £489,490, compared with the 1958 result of £266,072. A final dividend of 10 per cent has been proposed making a total distribution for the year of 15 per cent.

● Martin Walter Ltd., makers of the Dormobile Caravan, show a record turnover for 1959 of £3,837,052. This is an increase of 21.8 per cent.

● Richard Costain Ltd. have bought a controlling interest in the Australian contracting firm of Hansen & Yuncken Pty. Ltd., of Melbourne, Victoria. The Australian company will henceforth be known as Costain, Hansen

& Yuncken Pty. Ltd. and the present management will continue with Mr. C. R. Hansen as managing director, but Mr. D. J. Durack and other members of Richard Costain Ltd. will join the board.

● Mr. Godfrey Evans, C.B.E., the England and Kent cricketer, has been appointed an executive on the sales staff of the Davis & Timmins group of engineering companies.

● The Goodyear Tyre & Rubber Co. (Great Britain) Ltd. are to have a new two-storey office block constructed at their Wolverhampton plant. Construction of the building will shortly commence and the architects are Bertram Butler & Company, Wolverhampton.

● Bovis Holdings Ltd. show a group net profit for 1959 of £130,559, compared with the previous year's result of £96,405. An ordinary dividend of 12½ per cent per 5s unit is to be paid, together with a tax free capital distribution of three per cent per 5s unit.

● Dulrae Ltd. have moved to new and larger premises at Spur Road, North Feltham Trading Estate, Feltham, Middx. (telephone: Feltham 5052).

● Parkinson Cowan (Measurement Limited Division), in association with their agents, Fraser & Chalmers (SA) (Pty.) Ltd., have received an order from the Capetown Municipality, South Africa, for over 20,000 of their Type 44 domestic water meters.

● Truscon Ltd. show a group net profit for 1959 of £74,087, compared with the 1958 result of £27,081. A dividend of 7½d per ordinary share has been proposed.

● John Knowles & Co. (London) Ltd. have transferred their chief office to 13/21 Knight's Hill, West Norwood, London, S.E.27 (telephone: Gipsy Hill 6171). The company's depot at St. Pancras will continue and will be enlarged.

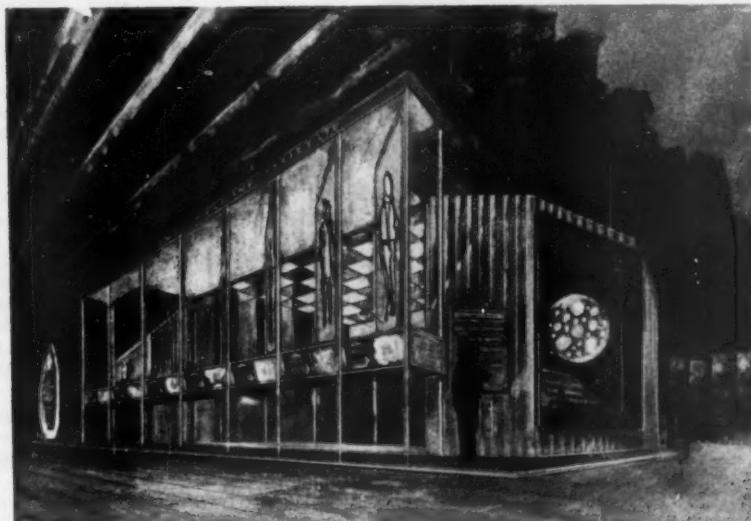
● Messrs. N. Douglas, E. H. Raquet and R. E. Eades have been appointed directors of G. T. Crouch Ltd., building contractors and development specialists of Crawley, Sussex.

● Mr. A. H. Freeman has been elected chairman and managing director of Heatrae Ltd. in succession to the late Mr. C. H. Smith.

● The Cascelloid Division of the British Xylonite Co. Ltd. have reduced the prices of their Cascalite translucent roofing sheets by 7 per cent. This represents a saving of over 5s on a Big Six profile sheet, 5ft long. New price lists are now available.

● Copies of the Report on Lightweight Fire Protection for Structural Steelwork, drawn up by Fredk. S. Snow & Partners, are again freely available. They can be obtained from Room 330, 52 Bedford Row, London, W.C.1.

An artist's impression of the stand of Imperial Chemical Industries Ltd., designed by Hulme Chadwick, A.R.I.B.A., at the British Exhibition, New York, June 10 to June 26, 1960. The stand's showpiece is a giant molecular model encased in a Perspex sphere



## NEW PRODUCTS

*In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer*

### Full Vision Sashless Window (A)

Pierson sliding sashless windows, a Canadian patent, are now being made under licence in this country. Basically, these windows have a hardwood frame of kiln-dried West African Utile, grooved to support and guide ground-edged sashless 3/16in crystal glass sheets which slide horizontally in the frame grooves. In addition, the framework is treated with a special durable sealer solution. The grooves are designed to cut out the need for a sliding track and to provide an efficient seal. It is claimed that results of air infiltration tests have shown the Pierson window to possess an efficiency four times greater than that of either a fully weather-stripped double hung window, or a metal sliding window and almost twice that of a conventional fully weather-stripped casement window. Pierson windows may be either single or double glazed and the singles can be converted into double glazed units, merely by adding a set Pierson window glazing. Sets are equipped with locking and compression fixing devices and an aspirating drain. The window is claimed to provide high standards of thermal efficiency and sound insulation, the U value being 0.5, installed. Standard sizes: Widths from 3ft to 3ft 10½in in increments based on brick stretcher multiples; Heights: 2ft, 3ft, 3ft 6in

and 4ft for clear opening for sliding sashes, with sublights or fanlights increasing total height to 5ft. In addition a series of non-opening, direct glazed lights is incorporated in the range together with external door units for use in conjunction with the windows. An almost unlimited number of composite arrangements can be achieved. The glass is easily removed from the window for cleaning. The timber frames do not need decoration as they have an attractive natural appearance, but paint can be applied if required. Price (including supply and installation of glass): Double glazed—from 12s 6d to 14s 6d per sq ft; Single glazed—from 8s to 9s 6d per sq ft.

*Jayanbee Joinery Ltd., Uxbridge, Middx. Uxbridge 8222.*

*Readers' Information Service, Ref. A. Date 8/6/60.*

★

### Metal Thermal/Acoustic Ceiling Panel (B)

The T/A, a metal thermal/acoustic panel, is the latest addition to the Bowater range of such products. It is made to a 20in module and basically consists of a tray of expanded metal, with 1in sides, having a fine crescent-shaped steel mesh to allow maximum passage of sound. The mesh tray is held on all four sides by a spot-welded, tinplated steel frame, and is filled with

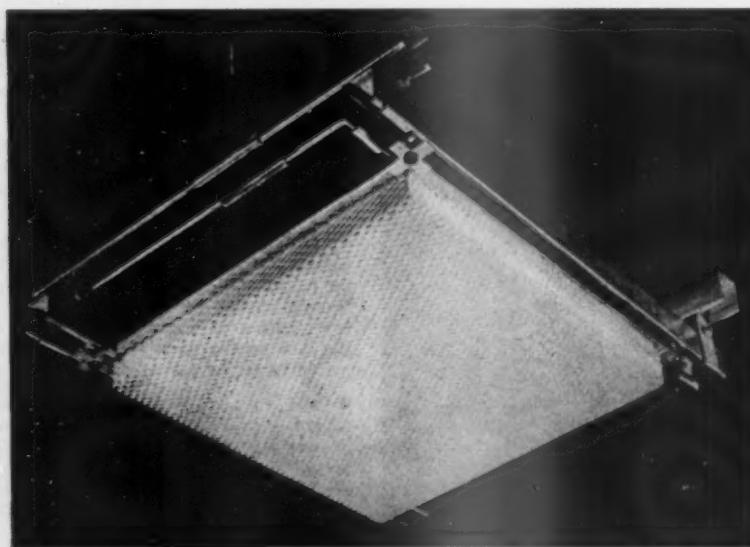


A

mineral wool and backed with asbestos paper. The mesh tray is zinc plated and passivated before finishing in any colour by dipping in plastic paint to make it rust proof and washable. There is a fine sheet of white P.V.C., not exceeding 0.0015in thickness, between the filling and the inside of the mesh face. This makes the panel dust-proof and provides the face with a decorative effect. Panels are demountable and a distinctive pattern is given to the ceiling by a pronounced gap between the mesh trays created by the overlapping of the ½in flanges of the metal frames. There are three methods of fixing: (1) direct to timber battens, using metal crosses and woodscrews to support the corners; (2) direct to concrete soffit, using channel and cross plate assemblies; and (3) by the Bowater rigid metal fixing system (illustration). The Bowater system consists of a cross grid of main and secondary channels. The main channels are spaced at up to 8ft centres and suspended by hanger rods from beams or floor slabs at centres up to a maximum of 6ft. The secondary channels are positioned at right angles, spaced at modular centres and connected to the main channel by a pinch bolt assembly. The T/A panels are then fitted to the secondary channels with cross plate assemblies at the corner. Panels can be trimmed to walls and abutments by using alloy channel, moulding or a margin of sheet material held in position by tee plate assemblies on the ceiling edge, or angle trim or moulding on the wall. It is claimed that tests carried out on a specimen of 100 sq ft comprising 36 panels mounted on a 12in airspace have shown very high absorption co-efficients over a wide range of frequencies, achieving 0.9 in the middle ranges. It is also stated that the T/A panel erected as a suspended ceiling has successfully passed a 2hr fire resistance test (reference F.R.O.S.I. No. 17) at the Fire Research Station. Panels can be fixed in suspended ceiling form at a cost of approximately 45s to 50s a sq yd.

*The Bowater Organisation, Building Products Division, Bowater House, Knightsbridge, London, S.W.1. Knightsbridge 7070.*

*Readers' Information Service, Ref. B. Date 8/6/60.*



B

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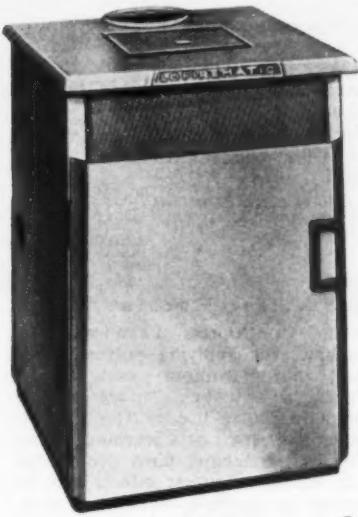
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GLAdstone 6633

## NEW PRODUCTS (continued)

### Domestic Solid Fuel Boiler (C)

The Lofirematic 15 is the latest addition to this company's range of solid fuel burning appliances. It is a domestic boiler with a continuous rated output of 15,000 B.Th.U./hr. The firebox will hold fuel to last 10 hours at slow burning rate. A thermostat with eight setting positions is provided and reacts to any change in water temperature, giving complete control of the boiler. There is a simple arrangement for riddling which completely de-ashes the fire and the boiler is completely sealed so that ash cannot escape. The top of the Lofirematic 15 is of cast iron and the casing



C

and door of sheet steel. Finishes: white, cream and pastel shades of blue, green and yellow. Price: approximately £29.

*Richard Haughton Ltd., Canning Street, Burnley, Lancs.*

*Readers' Information Service, Ref. C. Date 8/6/60.*

★

### Tank and Pipe Insulation

Tank insulation sets and pipe insulation made from Warmafoam (see New Products, A. & B.N., 25.5.60) polystyrene insulating material are now available. The tank sets will fit all standard sizes of galvanized and asbestos water storage tanks, and consist of fibre boards cut to size. The boards can easily be cut to allow for pipes and the sides can be fixed together with 2in nails. A 70gal tank set weighs about 3lb. Warmafoam pipe insulation is in pre-formed half-sections for all standard copper and steel pipes and fixings are made by pushing staples into the two halves.

Warmafoam can be bent round curves, and angles are speedily made by mitring with a sharp knife.

*Wola Products Ltd., Tangmere, Sussex, Hailsham 351.*  
*Readers' Information Service, Ref. D. Date 8/6/60.*

★

### New Lockset (E)

The Kingston Lockset has been added to the Everite range of plastics door furniture. Features include easily cleaned neck, unbreakable and rustless phosphor bronze spring and rustless brass washer. The standard fitting has a rectangular plate but a round rose is available if required. Colours and prices: Walnut or black: 7s 4d per set; red, cream, green, white or blue: 10s 6d per set.

*Evered & Co. Ltd., Surrey Works, Smethwick 40, Staffs. Smethwick 0881.*  
*Readers' Information Service, Ref. E. Date 8/6/60.*

★

### Modified Floor Warming Cable

The Aerialite floor warming cable range has been extended so that loadings are available in multiples of 100W from 800W to 3.8kW. All cables are now supplied in polythene insulated and p.v.c. sheathed cold tail terminations to comply with B.S. 1557/1954. The company offers a complete floor warming system and their design department will submit floor warming schemes to prospective clients. Cable prices have been substantially reduced and details are available on request.

*Aerialite Ltd., Castle Works, Stalybridge, Cheshire. Stalybridge 2223.*  
*Readers' Information Service, Ref. F. Date 8/6/60.*

★

### New Sanitary Fittings

Two chromium-plated fittings have been added to this makers' De Luxe range. These are No. 081 1½in Goblet lavatory waste and No. 078 bath overflow for lead. The waste fitting has a specially designed flange to provide faster flow and complete drain away of water when emptying basin. It is supplied with a rubber plug and measures 2½in flange by 2½in shank. The overflow is a dome-shaped fitting with six central overflow holes surrounding the chain anchor in circular formation.

*Sanbra Ltd., Aston Hall Road, Birmingham 6. East 1231.*  
*Readers' Information Service, Ref. G. Date 8/6/60.*

★

### Dual Purpose Drill (H)

The Rapid Vibrodrill is a portable electric dual purpose tool. By moving a knurled sleeve on the casing the drill can be converted from normal rotary



drilling to percussion drilling to enable holes to be drilled into hard materials at maximum speed. It is suitable for use on concrete, granite and engineering brick. It is claimed that 1½in can be drilled with ½in diameter percussion bits into flint aggregate concrete in 15sec, into granite aggregate concrete in 17sec and into Blue Staffordshire engineering brick in 18sec. The unit is suitable for use on either a.c. or d.c. supplies to voltages of 220 and 110. Rating: 260W. Weight: 6lb. Overall measurements: 13½in long by 5½in deep. Maximum capacity: ½in dia drill. Price £39 5s. The drill is double insulated to International Standards.

*Explosive Power Tools Ltd., Hope Street, Dukinfield, Cheshire. Ashton-under-Lyne 3904.*

*Readers' Information Service, Ref. H. Date 8/6/60.*

★

### Ceiling Roses

The Contemporary range of combined block and ceiling roses feature an integral back plate conforming with I.E.E. Regulation 207G. They are available either as two- or three-plate types and also with looping terminal. Fixing centres are at 2in and all types are fitted with porcelain interiors and easily wired pillar terminals. These fittings do away with the wooden block. They can be supplied either with automatic cord grip



H

## NEW PRODUCTS (continued)

or with gland type cord grip for t.r.s. flexible and in brown or white colouring. Prices: automatic cord grip types range from 27s to 34s per doz and the gland type from 35s to 43s per doz.

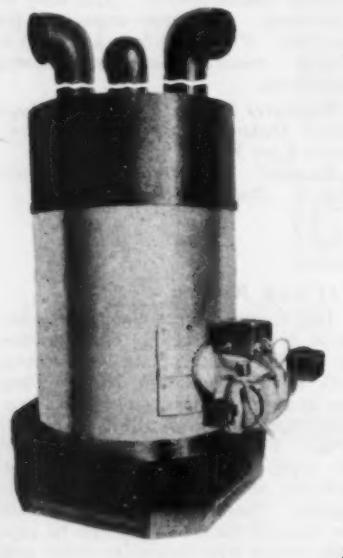
*Nettle Accessories Ltd., Sales Division, Warren Street, Stockport, Cheshire. Stockport 7155.*

*Readers' Information Service, Ref. I. Date 8/6/60.*



### Oil-fired Space Heaters (J)

Speedyheaters are a range of oil-fired space heating units suitable for factories, warehouses, offices and other large premises. They are complete with electrical control and fuel systems and apart from the provision of a flue pipe, have only to be connected to the electric and fuel supplies for immediate operation. Outputs of up to 800,000 B.Th.U./hr are achieved (500,000 B.Th.U./hr unit illustrated). A hot water supply can be obtained



by using an economizer and the unit operated without heat in summer to provide air circulation. Speedyheaters basically consist of a furnace chamber with a shell-type pressure-jet burner, fan chamber and heat exchanger. The fan chamber, with thermostatically controlled Aerofoil fan, is at the base of the unit and draws air from either inside or outside the building, forcing it through a combustion chamber and the outer wall of the unit. Thus pre-heated, the air enters the heat exchanger where it attains maximum heat and then passes into the building through adjustable

diffusers. Ducting systems can be provided for heating separate rooms. Automatic flame failure control is fitted and a limit thermostat which operates on air-duct temperature and locks out the burner if a pre-determined temperature is reached. Another safety device is a protection against overloading. Finish: gold/bronze hammer cellulose. The 500,000 B.Th.U./hr unit measures 3ft 6in dia by 6ft 11in high.

*Speedyheat Ltd., 44 Tower Hill, London, E.C.3.*

*Readers' Information Service, Ref. J. Date 8/6/60.*



### Street Lamp Servicing Vehicle (K)

An Access Tallescope and a Harbilt electric truck have been combined to produce a mobile street lamp servicing vehicle. In addition to its primary function, the Tallescope can be easily removed from the truck for general overhead work leaving a completely clear platform ready for any sort of utility work. An advantage is that the Tallescope can be adjusted for the vertical laterally and longitudinally to overcome road camber and gradients, and has been tested to an angle of 15 degrees from the vertical. The truck itself has a range of 20 to 30 miles and a driver's compartment of glass fibre. The aluminium alloy Tallescope has a maximum working height of 26ft unmounted and 28ft mounted. Overall length of vehicle: 10ft 3in (with extensions of Tallescope, 14ft 6in) by 4ft 2in wide. Height of platform: 2ft. Height with Tallescope in folded position: 7ft 4in.

*Access Equipment Ltd., Maylands Avenue, Hemel Hempstead, Herts. Boxmoor 5781.*

*Readers' Information Service, Ref. K. Date 8/6/60.*



### Vertical Band Resaw

Vertical band resaw, type AOA, for slabs and all normal resaw work, is the latest addition to this company's range of woodworking machinery. It has a headrig of cast iron and the lower half encloses the bottom saw pulley, the top saw pulley being carried in a "U" bracket between two bearings (not overhanging) and can be canted to track the blade. The machine has a variable speed from zero to 160ft per min and is fitted with a brake for quick stopping. Exclusive features include a feed unit with caterpillar power driven fence instead of idle rollers. There is a large diameter feed roller of the serrated type suspended at the end of a swivelling arm and this, together with the fence, does away with the possibility of irregular thickness. There is also an automatic self-adjusting opening between fence and rollers, safety device declutching mechanism, and a ball bearing roller



**K**

table for returning timber to operator. Saw pulleys: 44in dia. Width of blade: 4½in. Distance blade to live fence: 9in. Distance blade to feed roller: 8in.

*Guilliet Sons & Co. Ltd., 28-30 Rivington Street, London, E.C.2. Shoreditch 6153.*

*Readers' Information Service, Ref. L. Date 8/6/60.*



### Laminating Machine

The Contropress laminating machine, for applying polyester and vinyl films without using static presses, is now being made by this company under licence from C. A. Litzler Co. Inc., of Cleveland, Ohio. With this machine, films pre-printed with veneer or other effects can be applied to plywood, blockwood, chipboard, asbestos board, hardboard and fibreboard for either indoor or outdoor use. Shuttering boards for use on concrete structures, skin panels for foam laminates and cigarette-proof boards can also be produced by laminating foils or vinyl films to cheap baseboards. Sheet metal can be laminated with film and the machine will also laminate thin aluminium, copper and stainless steel to plywood. It is claimed that it will reduce the retail price of hard-surfaced decorative wall, ceiling and roof boards by about one-third to one-half of current U.K. prices. It is stated that amongst work being carried out in the U.S.A., a new type of pre-formed outdoor house panel is being produced which uses two film-on-plywood laminates with a central core of polyurethane foam. The Contropress produces the inner surface plywood with a clear polyester film on natural veneer and the outer with a heavy cast P.V.C. film for increased weather resistance.

*Mather & Platt Ltd., Park Works, Manchester 10.*

*Readers' Information Service, Ref. M. Date 8/6/60.*



# STORK take to Oppanol BA



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and Ancorite Limited (Specialist Flooring Contractors)

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4 STANHOPE GATE LONDON W1 HYDE PARK 0880

# But... Practical Building needs LIME



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- Reliable strengths within closely known limits.
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A booklet on LIME/sand mixes gauged with cement and conforming to British Standard Codes of Practice will be sent free on application to either of the above.

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This is your safeguard to ensure satisfaction.

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*your present and future  
take shape with*

## AYRSHIRE Partitions



Ayrshire metal partitions, in one-colour or multi-tone stove enamel or plastic finishes, are made to a unit system which can be tailored exactly to your needs. They give a striking, functional, invigorating and impressive appearance to your offices. When changed conditions require altered accommodation, Ayrshire Partitions can be moved around to meet your needs.

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### METAL PARTITIONS

### THE AYRSHIRE DOCKYARD CO. LTD.

IRVINE, AYRSHIRE. Telephone: IRVINE 2271-3

Grand Buildings, Trafalgar Square, London, WC2. Phone: Trafalgar 6651/2

# CURRENT MEASURED RATES (LONDON)

These apply to new work of normal character and some size. These rates are for time and materials only and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing tables which carried up to June 8, 1960.

## (COPYRIGHT)

### ESSENTIAL ON-COSTS

Fees payable to L.C.C. for District Surveyor:

The new buildings of ordinary construction not exceeding 5,000 cubic feet

£3

Over 5,000 cubic feet for every extra 1,000 cubic feet up to 1,000 cubic feet add

4/-

Buildings over four storeys add 3d per 1,000 cubic feet extra for each storey up to eight

3d

### ALTERATIONS AND ADDITIONS

Up to £100 cost

£3

Over £100 up to £1,000— Per £100 cost

15/-

Over £1,000 up to £5,000 Ditto

5/-

Over £5,000 Ditto

3/-

Public buildings add 50%

Steel framed or R.C. buildings.—See L.C.C. (General Powers Act 1955) also fees in respect of means of escape in case of fire.

Allowance to cover National Insurances, Holidays with Pay and Public Holidays, Welfare, Third Party Risk, Travelling and Guaranteed Week is made in the rates attached to the items.

Allow for Fire Insurance

1/6%

Allow for Water for use on the works and apparatus

5/-%

Allow for hoarding, or similar licences in City of London say £10

Do., under Borough Councils per each month say 2/6

Allow for Office, Fire, Attendance on C. of W., etc. p. week say 30/-

### ADMINISTRATION AND CONTROL

Percentage costs on normal contracts in accordance with Builders Turnover per Annum, see appropriate column hereunder:

Turnover in Thousands

Place	25	50	75	100
At depot	13%	9%	7%	6%
On job	6%	5 1/2%	4 1/2%	4 1/2%

SPOT ITEMS AND DEMOLITION, ETC.	Per ft run
Hoarding erected and removed	20/-
Planked gangway with handrail, etc. do.	10/-
Proper gantry do.	78/-
Sleeper roadways	16/6
Needling, strutting and shoring including all labours and use and waste in erection and removal	20/-

ALTERATION-DEMOLITION—	1	1 1/2	2	Per yard
	Brick	Brick	Brick	(Per ft super)
Cutting out cement concrete or brickwork in small quantities	1/3	2/6	3/7	64/-
Do. if either in very small quantities or reinforced	2/2	4/1	6/-	95/-
Debris into baskets and removed from inside to outside of bldg.	3 1/2d	7d	9d	14/-

SCAFFOLDING (Avg. 45ft high)	Per yard superficial	1 month	3 months	5 months
Putlog type—4ft 6in lift	8/-	10/6	13/6	
Do. —6ft 0in do.	5/6	8/-	10/6	
Independent type—4ft 6in lift	10/6	14/6	19/-	
Do. —6ft 0in do.	7/6	10/6	13/-	

EXCAVATION	Common	Loamy	Gravel	Rock or similar
Per Yard Cube	By hand	Soil	Clay	or Clay
Reducing levels		7/6	8/10	10/3
Surface trench not exceeding 5ft deep	14/10	17/8	23/7	84/-
Do. from 5ft to 10ft	27/-	30/4	36/4	91/6
Do. from 10ft to 15ft	30/9	36/7	42/11	100/-
Fill in and ram	6/-	6/7	6/7	6/5
Barrowing 25yd	3/3	3/7	3/7	4/2
Load vehicles and tip 8 miles away	18/9	18/9	19/9	20/7

PLANK AND STRUT	To 5ft	5 to 10ft	10 to 15ft
To trenches, in normal ground	deep	deep	deep
Per Ft Super	7d	8 1/2d	10d

CONCRETE	1 1/2in Ballast Aggregate	Per yard cube
1 : 3 : 6 Cement concrete in foundations		80/-
Do. around grillages		83/-

REINFORCED CONCRETE	1 : 2 : 4—1 1/2in concrete, worked around reinforcement, between formwork in the following (at various levels):—Per cubic yard
Foundations and surface beds	89/10
Walls, 12in thick or more	96/3

Sectional inches	Lintols and beams	Columns and casings	Braces and projections	Per cubic ft
Up to 36 ..	4/7	5/2	5/4	Per cubic ft
36 to 72 ..	4/8	5/-	5/2	do.
72 to 144 ..	4/5	4/11	5/1	do.
over 144 ..	4/3	4/10	5/-	do.
Walls 6in thick ..			18/-	Per super yd
Do. 9in thick ..			26/-	do.
Suspended floors average 6in thick ..			18/6	do.

REINFORCING RODS (round) bent and placed. (Ex Mills)—				
Per cwt.	4in	4in	4in	4 to 1in
In floors and beams ..	92/-	80/-	75/9	67/6
In walls ..	98/-	85/-	79/9	70/6
In columns ..	105/6	90/3	81/-	73/9

FORMWORK and Supports (4 times use)—				
Floor soffits	Beams	Walls	Columns	
20/3 per yard	3/-	2/8	2/8 per super ft	

BRICKWORK				
BRICKWORK per YARD superficial reduced to ONE BRICK in thickness (scaffold to add)—				
In 1 : 3 cement mortar				
Flettons or other similar at 118/- per 1,000				42/-
Mild Stocks or do., at 260/- per 1,000				60/-
Second Stocks or do., at 339/- per 1,000				66/8
Southwater engineering or similar bricks, at 400/6 per 1,000				78/-
Blue Staffordshire wire cut at 547/- per 1,000				95/-
<i>Add</i> if 1 : 1 : 6 Cement-Lime mortar is used in lieu of 1 : 3 Portland Cement mortar				2d
<i>Add</i> if brickwork commences above ground level				4/9
Do. if in backing to masonry including cutting and waste for bonding				3/10
Do. if circular-on-plan				9/-
Do. if in underpinning				9/-

BRICKWORK IN THICKNESS NOT REDUCED—				
Per yard superficial	Brick, on edge	Half-brick, fair both sides	1 Brick, fair both sides	11in Hollow with 2in cavity and G.I. TIES
In Flettons or similar 18/3	23/4	43/1	49/3	
In second stocks or do. 31/3	41/4	74/-	73/-	
<i>Add</i> : for pointing as work proceeds, per side ..	1/9	1/11	1/9	1/9
Thickness to old walls, including cutting, toothing and bonding to same an average total thickness of 1/2 brick ..	57/-	72/-	per yd super do.	
Do. all as last but an average total thickness of 1 1/2 bricks ..	78/-	102/6		

WALLS BUILT IN SUPERIOR BRICKS—				
In 1 : 3 Cement mortar, fair faced and pointed on both sides as the work proceeds:—	Half-Brick	One Brick		
In first-quality Stocks at 375/-	45/-	75/-	Per yd	
In red facings at 330/-	38/6	67/9	super do.	
In blue pressed facings at 614/-	60/9	106/2		

GENERAL AND SUNDAY				
Cut tooth and bond new brickwork to old				5/9 per ft
Damp-proof course, double slate, horizontal				4/9 super
Do., as last, but vertical				5/9 do.
Do., bitumen, Hessian base, horizontal				1/- do.
Frames, bed and point in cement mortar, one side 4 1/2d per ft run				
Window board of 6in by 6in by 1in rounded on edge				
quarry tiles, bedded, pointed, cut and fitted				4/3 do.
Terracotta air bricks built in and pointed, including flue	9in by 6in	6/6	9in by 9in	11/6 each
Chimney pots, plain red, set and flaunchned in cement mortar ..	1ft high	18/-	2ft high	26/- each
Metal windows, assembled, hoisted and fixed, lugs cut and pinned and frames bedded and pointed one side in cement mortar ..	Up to 5ft super		5ft to 10ft super	

Leaving holes through walls for pipes and afterwards making good ..				
Small pipes	3d per in	in depth	6d per in	in depth
			11d do.	2/- do.
Cutting do., and afterwards do ..				
Cut mortices in brickwork or concrete for bolts or dowels and run in with cement grout ..				
Holdfasts of stout iron hoop bent, holed and screwed to frame and built in ..				1/3 per in in depth, each
				1/7 each

## MEASURED RATES—continued

BRICKWORK—continued  
FACING—

Extra only over common brickwork (118/- per 1,000) for facing with superior bricks in *Flemish bond* and pointing as the work proceeds.

Rustic Flettons (150/-)	4/2 per yd super
White (220/-)	9/9 do.
First Stocks (375/-)	21/- do.
Reds (350/-)	19/3 do.
Blue pressed (614/-)	40/9 do.
If built in English bond, Add 12½% to above.	
If do., half-brick stretcher bond, Less 25% off above.	

## COPING—

All labour and material in forming brick-on-edge coping with two course of roofing tiles under and cement weather fillets on both sides, built in cement and pointed as the work proceeds.

	Per ft run	9in thick	14in thick
In picked Flettons	6/3	8/5	
In first-quality Stocks	8/-	12/-	
In red facings	7/5	11/11	
Plumbing angles	2d per ft run		
Fair cutting	1/- do.		
Fair rake cutting	1/7 do.		
Fair circular cutting	1/7 do.		
Fair squint or birdsmouth	1/11 do.		

## ARCHES

Extra over Fletton brickwork for forming window head with red facing bricks set on end and with 4½in soffits and pointing	ft run	3/9
Do. for rubbed and gauged flat arch in red rubbers set in putty with fine joints	ft super	19/-

PARTITIONS	Per yd super—
(75 yards)	2in 2½in 3in
Concrete slab partitions in cement mortar	11/9 13/6 15/-
Hollow clay do.	13/5 15/6 18/-
Cutting and bonding at angles, intersections and ends	5d ft run

PAVING	lin	1½in	1¾in
Grano trowelled gauge 5 : 2	8/6	9/6	10/8 yd super
1½in skirting, square top and cove bottom			2/10 ft run
½in by 6in red quarry tile paving	...	34/6 yd super	
½in by 6in do. skirting	...	2/- ft run	
Jointless flooring, ½in thick	...	20/- yd super	

ASPHALT (normal conditions for 200 yds super and upwards)	B.S.	
½in pitch mastic floor in one coat on felt underlay	1450/48	
on prepared concrete base	1375/47	

Per yd super	13/6	Brown	Red
Unit	15/-	Mastic	16/6
B.S. 988		Natural	
		Rock	
B.S.S. 1162/44			
½in in two thicknesses on felt underlay on prepared concrete base	yd super	14/3	18/6
Do. in narrow widths	ft super	2/-	2/7
½in skirting 6in high, angle fillet at bottom splayed and turned in at top	ft run	2/4	2/7
External angles	each	6d	6d
Internal do.	each	10d	10d
Tanking or Damp Course	B.S. 1097/43	B.S. 1418/47	
Vertical in two thicknesses	yd super	19/6	24/6
½in horizontal do.	yd super	13/-	18/9
Vertical in three thicknesses	yd super	26/6	33/-
1½in horizontal do.	yd super	19/-	27/6
Labour rounded external angle	per ft run	6d	6d
Do. internal angle fillet	per ft run	10d	11d
Do. double do.	per ft run	1/8	1/8
Collars to small pipes	each	3/6	4/-
Do. to large pipes	each	6/9	7/6

## DRAINAGE

Per lineal yd	1ft in depth	6/2
Excavate trench, and plank and strut to sides, consolidate bottom to fall, return, fill and ram earth after drain is laid and load and remove surplus.	2 do.	10/5
In ordinary ground—moderately firm.	3 do.	24/-
(By hand)	4 do.	31/-
	5 do.	38/4
	6 do.	57/8
	7 do.	71/-
	8 do.	84/-
	9 do.	97/-
	10 do.	110/-
	11 do.	134/6
	12 do.	152/-

Portland cement (1 : 6)	Per yd run
concrete bed under drain pipes and benching up on both sides—6in thick	6in 9in
	20in wide 23in wide
	8/6 10/- 12/3

## SALT GLAZED SANITARY DRAIN PIPES

and lay and joint with Yarn and Cement Mortar in trench.

Quality	Quantity	4in	6in	9in	Per ft run
"Best"	2ton or more	3/1	4/8	7/8	
	100 pieces and over				3/8 5/6 9/4
	under 100 pieces				3/10 5/9 9/7
"Best Tested"	2ton or more				3/8 5/6 9/4
	100 pieces and over				4/7 6/10 11/6
	under 100 pieces				4/9 7/2 11/10
"British Standard"	2ton or more	3/4	5/-	8/2	
	100 pieces and over				4/- 6/- 9/9
	under 100 pieces				4/1 6/1 10/2
"British Standard Tested"	2ton or more	3/11	5/10	9/10	
	100 pieces and over				4/10 7/3 12/5
	under 100 pieces				4/11 7/5 12/9
Extra for bends "Best"—Contained in 2ton lots	do.	4/2	6/3	14/6	
Extra for junction "Best" } 4in on 4in—6in on 6in—9in on 9in	do.	6/6	9/9	27/-	

## IRON DRAIN PIPES—

Heavy cast iron socketed and laying and jointing in molten lead—

In main runs	4in	6in
In branches	16/6	23/6

Extra over last for bends and extra joint	30/2	66/1
Do. on do. for junctions and extra joint	67/-	135/-
Cast-iron gulley with 10½in inlet and 4in outlet, composed of hooper and trap, and 9in extension piece and 10½in grating, and jointing all together, and jointing to drain and surrounding in concrete		
Do. rain water, shoe with vertical inlet and inspection cover, and joint up and embed	187/-	—
	87/6	146/6

## MANHOLE SUNDRIES—

Salt glazed straight half-round main channels	4in	6in
Do. curved	each	6/- 8/7
Do. three-quarter section splayed channel bends (Barrows or similar)	do.	14/- 20/-
Heavy manhole steps galvanized	do.	18/- 26/6
Fix only manhole covers	do.	12/6 —
4in Mica flap, brass faced, f.a.i. valves and fix with molten lead joint	do.	12/- —

## ROOFER

## CORRUGATED ASBESTOS SHEETS

P.C. 8/3½ per super yd including side and end laps and fixing to wood	167/-	per square
Eaves filler pieces	2/6	ft run
Adjustable ridge	4/9	do.
Barge boards	3/4	do.

Plain roofing tiles, machine made, sand faced, 4in gauge nailed every 4th course with 1½in galvanized nails, to battens (measured separately)	265/-	per square
Extra over last for top edge or abutment cutting	1/4 ft run	
Do. for double course at eaves	2/5	do.
Do. for verges, undercloak, bed and point	3/9	do.
Do. Valley tiles including cutting and waste on both sides	11/6	do.
Do. Bonnet hips and do. bed and point	12/-	do.
Half-round ridge and bed and point	3/6	do.
Fixing soakers	1/8	dozen

Bituminous felt roofing in two layers, laid breaking joint and bedded with hot mastic and finished with fine dry grit

Do. but in one layer only	13/½	yd
	9/6	super

WELSH SLATING	Per square
3in lap, 2 zinc nails to each slate	16' + 10' 18' + 10' 20' + 10'

Additional labours

At tops, verges and abutments—straight	1/9	1/10	2/2
Do. —raking	2/7	2/9	3/1
At hips and valleys (each side)	2/7	2/9	3/1
At eaves, double course	3/6	3/8	4/2
Do. to falls	5/3	5/4	6/3



## It pays you and your clients to put in *solid fuel* central heating

**Lowest running costs.** The big news in central heating these days is the amazing cheapness of the solid fuel systems. For example, the average weekly running cost for a two- or three-radiator system can be as little as 9/9d! Just compare that with oil, gas and electricity—see chart on right.

**Lower installation costs.** Compared with oil, solid fuel systems are much cheaper to buy and install. The new solid fuel boilers are really streamlined and require very little attention. They are thermostatically controlled and finished in gleaming vitreous enamel in a range of modern colours. This is going to mean a lot to every househunter!

**Wonderful credit terms under the N.C.B. scheme. No down payment—low interest—five years to pay—tax relief.**

**Lowest maintenance costs.** Solid fuel systems cost practically nothing to maintain. But with other fuels, skilled maintenance is necessary and this can cost from £5 to £15 per year—another 2/- to 6/- a week on the running cost.

**Compare the costs.** These are typical weekly costs, averaged over the year, for centrally heating a three-bedroomed house or bungalow—and hot water summer and winter. Look how much cheaper solid fuel is.

6 or 7 radiators and hot water			
2 or 3 radiators and hot water			
COKE in independent boiler	9/- per cwt	9/9d	15/-
<b>SMALL ANTHRACITE</b> in gravity feed boiler	12/- per cwt	—	14/1d
<b>GAS</b>	1/4d therm plus, say, 2/8d a week standing charge	16/1d	23/8d
<b>ELECTRICITY</b>	1d unit (No standing charge included)	18/2d	29/10d
<b>OIL</b>	1/5½d gallon	12/10d	22/8d

\* plus 2/- to 6/- a week maintenance cost.

Write for **FREE** booklet on Central Heating and list of other technical publications to the Coal Utilisation Council, 3 Upper Belgrave Street, London, SW1. Also available 'Central Heating for Houses', a complete 120-page illustrated survey of all the various systems available, from the open-fire-and-back-boiler to the small pipe system. Copies 2/6d each.

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## MEASURED RATES—continued

## FLOORS AND FLATS

Hollow tile <i>in situ</i> or pre-cast units hoisted, bedded and fixed—			Span
Superimposed load in lb per ft super	12ft	16ft	
50	44/9	52/9	
Per yd super	100	47/-	59/-
	150	53/9	67/3
20lb has been allowed to cover dead load in surface, finish.			
Fair edge to slabs	..	..	9d per ft run
Splay cutting and waste	..	..	1/9 do.

## CARPENTER AND JOINER

SOFTWOOD CARCASSING—		per ft cube		
Labour, materials, waste nails	Plates	Joists	Rafters	Trusses
hoisting and fixing	19/4	20/10	22/7	26/-

FLOORING—	Per square—	1/2in	1in	1 1/2in
Rough boarding	145/-	172/-	204/-	
Softwood batten flooring, straight joints, splayed headings	148/-	169/-	207/6	
Do. grooved and tongued	169/6	191/6	246/-	

SKIRTING—	Per ft superficial	1/2in	1in	1in
Wrot softwood moulded skirting with grounds and backings plugged	4/-	4/8	5/3	
Mitres to do.	3d per sectional in.			
Fitted ends	2d	do.		

SASHES, fanlights, casements, borrowed lights, etc.—		Without bars	With bars
Per ft super—		(2ft sup. in each square)	
2in softwood rebated, moulded and fixed	3/6		6/5
Add if fitted with beads	6d		6/5
Add if hanging on butts	3/- each		

WINDOWS, hung on lines—		Overall size of frames—
Softwood cased frames, 1in inner and outer linings, 1 1/2in pulley stiles, 2in sashes, oak sill	6ft	21ft 32ft 44ft
Per ft super	21/6	12/- 9/- 7/-
Windows as described	—	1/8 2/2 2/2
Add if sashes in squares, about 2ft super in each	—	each
Extra for hanging sashes with lines, weights and axle pulleys	38/-	66/- 77/- 88/-

FINISHINGS TO OPENINGS		Per ft super—
Softwood linings, tongued at angles and tongued to frame including grounds and backings	4/8	5/3 5/10 6/4
Add if crosstongued	8d	8d 8d 8d
Softwood wrot rounded on front edge and with tongue at back window board including groove in sill and bearers	3/10	4/4 4/- 5/6
Add for ends to last notched, returned and rounded	1/1	1/2 1/3 1/4

Per ft run—	Sectional area in in—				
	1	2	3	4	5
Softwood wrot and fixed in bearers, backings, grounds, fillets, and similar	4 1/2d	7d	9 1/2d	1/-	1/3 1/5
Add if in short lengths	2d	2d	2 1/2d	2 1/2d	3d 3d
.. if plugged to brickwork	6d	6d	6d	6d	6d 6d
.. if framed as in legs and bearers	3d	3d	4d	4d	6d 6d
.. if rebated or grooved or beaded	2d	2d	2d	2d	2d 2d
.. if chamfered or rounded edges					3d
.. if moulded in architraves, capping, etc.					6d

DOOR FRAMES	Per ft run				
Per sectional in—	6in	8in	10in	12in	13in
Softwood, wrot, reb. & rdd.	2/3	2/8	3/2	3/6	3/10

DOORS—Per ft super	Number of panels—					
2in	1	2	3	4	5	6
Softwood square framed and flat panels, both sides, on butts	6/-	6/10	7/5	8/-	8/4	8/10
1 1/2in do.	5/4	6/2	6/7	7/2	7/7	8/1
Add for each side moulded	3d	4d	5d	6d	7d	8d
Add B.S. flush panelled	1/6	1/6	1/6 1/2	1/7	1/8	1/8

	Per ft super—	1/2in	1in	1 1/2in	1 3/4in
In shelves, table tops, wrot and fixed	2/5	2/9	3/4	3/9	
Do. in divisions and ends framed	2/9	3/1	3/8	4/3	
Add if crosstongued	6d	6d	6d	6d	
Add if buttoned	6d	6d	6d	6d	

SUNDRIES—Per ft run—	In short lengths	In long lengths	Add for cups and screws
Glazing, beads mitred around and fixed with beads	6d	4d	2d
Rounded heel or hollow		4d	
Tongued and grooved angle		6d	
Glue blocking		6d	
Mitres		3d	per sectional in
Fitted ends		2d	do.

STAIRCASE—	Per ft super
1 1/2in Softwood treads with moulded nosings	
1in risers tongued both edges and glued, blocked and bracketed on and including two fir framed carriages	
Do. but in winders	6/6
1 1/2in crosstongued landing on framed carriages	8/-
2in moulded string	6/3
2in. do. ramped	5/6
Ends framed to newel	14/-
Tongued heading joints	10/- each
Ends of treads and risers housed to string	6/- do.
Extra for curtail ends to steps, glued up and veneered riser and solid blocking	3/6 do.
Balusters about 2ft 9in long, square and framed each end	100/- do.
3 1/2in square newel, framed	4/- per ft run
African mahogany moulded 3in by 2in hand-rail. (Joints below)	9/3
Do. ramped 18in girth (do.)	54/- each
Do. wreathed do. (do.)	160/- do.
Joint or framed ends	12/- do.

FIXING ONLY IRONMONGERY	To deal	To hardwood
Barrel bolts	2/-	3/- each
Flush bolts	5/9	5/- do.
Sash fasteners	3/-	3/6 do.
Rim locks and furniture	4/6	6/- do.
Mortice locks and do.	10/-	20/- do.
Cupboard locks	2/9	3/5 do.
Casement fasteners	2/6	3/- do.
Do. stays	2/6	3/ do.
Grip handles	2/6	3/6 do.
Spring catches	2/6	3/- do.
Cabin hooks	1/10	2/5 do.
Floor springs including oil	50/-	65/- do.
Overhead springs	15/-	20/- do.
Springhinges	15/-	20/- do.

SMITH AND FOUNDER	Additional cost per cwt over basic sections for following R.S.J.s	Per cwt
Basis framed steel joists and hoist and fix		80/- per cwt
Do. but in compound girders	90/- do.	
Do. but in stanchions	92/- do.	
Trusses	130/- do.	
9in by 7in, 10in by 8in, 12in by 8in, 14in by 8in, 16in by 8in, 18in by 6in, 18in by 7in, 20in by 6in, 20in by 7 1/2in	8d per cwt	
22in by 7in, 1/1 cwt, 4in by 3in	1/10 do.	
5in by 3in, 5in by 2 1/2in	2/2 do.	
6in by 3in, 24in by 7 1/2in	2/6 do.	
3in by 3in, 2/9 cwt, 4 1/2in by 1 1/2in	4/- do.	
3in by 1 1/2in	4/4 do.	
Cleats, brackets, packing pieces, etc., in connections, including rivets and bolts	174/- do.	
Forged straps	132/- do.	
Wrot iron balustrade	175/- do.	

RAINWATER GOODS	Per ft lineal
Round cast-iron pipe with socketed joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance pieces to plugs in brickwork	2in 3in 4in
Extra for shoes	4/7 5/3 6/7
Do. junctions	7/2 10/9 15/7
Do. bends	8/5 8/6 10/10
RAINWATER GUTTERS	Per ft run—
Half round C1 gutters jointed in red lead and bolted and fixed on iron brackets	4in 5in 6in
Ogee do. All as last	4/7 5/3 6/6
Extra for stop ends	3/4 4/1 4/3
Do. angles or outlets	5/10 7/5 8/9

MEASURED RATES—*continued*

## PLUMBER

EXTERNAL	Soakers	Flats	Flashings
4lb Milled Sheet lead per cwt 155/-	197/-	209/6	
<b>LEAD PIPES: running joints, etc.</b>			
Per ft run	1/2in	2in	1in
Main	4/8	6/5	8/9
Service	4/1	5/7	7/4
Waste	2/9	3/11	5/1
Bends	each	—	1/9
Solder joints	do.	9/8	11/8
Union and joints	do.	14/2	17/1
Stop valve and do.	do.	27/10	37/10
Bib valve and do.	do.	19/8	27/—
Ball valve and do.	do.	26/9	36/9
Sleeve and do.	do.	—	—
			21/6 29/7

## COPPER TUBES

	1/2in	2in	1in	1 1/2in	1 1/2in	2in
Tubes per ft run	3/2	3/10	4/11	5/9	7/1	10/—
Couplings: straight each	3/—	3/6	5/—	6/10	11/6	15/10
Do. Elbows each	5/4	6/3	8/4	12/2	18/6	35/—
Do. Tees do.	8/7	9/11	13/3	19/—	28/7	39/9
Overflow bends	9/2	11/8	16/5	—	—	—
Stop cocks do.	22/—	31/6	50/—	77/—	97/—	153/—

	1/2in	2in	1in	1 1/2in	1 1/2in	2in
Tubes, per ft run	2/7	3/—	3/7	4/6	5/—	6/11
Bends and fix, each	5/—	5/11	8/—	10/6	12/2	18/6
Tees and do.	5/5	6/9	8/—	10/2	12/5	18/2
Fire bends	2/2	2/9	3/1	3/4	4/5	8/—

	Coated iron (M) weight L.C.C. soil and waste fixed with nails and distance	2in	4in
pieces and molten lead joints	..	5/11	8/7 ft run
Extra only for bends and joint	..	15/3	24/5 each
Do. junctions and joints	..	16/10	30/8 do.
Do. cleaning doors	..	16/4	18/1 do.
Domical wire guards	..	2/6	2/9 do.

## PLASTERER

	yd super
Lime and hair	1/2in Render and set
Do.	1/2in Do. float and set
Sirapite	1in Skimming coat
Do.	1in Render and set
Do.	1in Render, float and set
Portland	1in Backing coat
Do.	1in Plain face
Do.	1in Floor screed
Keenes	1in Skimming coat
Dubbing	1in Thick or less
Metal Lathing	1in mesh by 24 Gauge
6in by 6in by 1in Earthenware Plain Glazed Tiles, in fair quantity white, and setting (on prepared screed)	45/—
Rounded edge. Extra over last	6d per ft run
Angles in do.	6d each
Cutting and fitting. Around pipes or clips	1/6 do.
Narrow widths. 3in to 6in wide. Add 75 per cent to plain surface.	
Do. 6in to 12in do. Add 40 per cent to plain surface.	
Sundry labours per ft lineal:—	
Quirk 3d. Arris 4d. Fair edge 3d. Rounded edge 5d.	
Flush bead 1/9.	
Mouldings—6d per in girth.	
Jointing new plastering to old 4d.	

## POLISHING

	6" Girth
NEW WORK—	Ft super
Staining, bodying-in and French Polish	3/—
Staining and wax polishing on hardwood	1/6
<b>OLD WORK—</b>	
Cleaning down old work and repolish	1/4
Stripping, preparing and repolishing	3/4
	2/3

## INTERNAL PAINTING

	With white lead base in common colours, with brushes.			
	Knot	Prime	Prime	Add
	stop	and	paint	for each
ON WOOD—	prime	once	twice	extra
General surfaces	2/9	5/7	8/—	2/4 yd super

Running lengths not exceeding 3in wide	4/4d	8/4d	1/-	3/4d yd run
Do. 3in to 6in wide	5/5d	11d	1/4	4/4d do.
Do. 6in to 9in wide	9d	1/6	2/1	7/4d do.
Do. 9in to 12in wide	11d	1/11	2/7	9/4d do.
Sash square each side	5/5	10/3	14/11	4/4d per do.
Do. in large squares	8/3	15/—	21/—	6/7 do.
Opening edges	7d	1/2	1/9	7d each

Casement frames each side	6d	1/-	1/4	5d yd run
Mullions or transoms do.	8d	1/5	2/-	7d do.

ON PLASTER	One coat	Two coats	Three coats	
Paint on surfaces	3/1	5/10	8/3 per yd super	

Do. on mouldings	3/5	6/5	9/2 do.
Do. on enrichment	6/2	11/8	16/6

ON STEEL	2/5	4/7	6/10 do.
Paint on structural steel	2/8	5/1	7/8 do.

Do. on roof trusses	3/5	5/9	8/7 do.
Do. on metal windows measured over all on both sides, divided into squares	2/10	5/-	6/9 do.

Do. divided into large squares	2/5	4/2	5/10 do.
Do. divided into extra large squares	10d	1/6	2/2 each

Do. on opening edges	10d	1/6	2/2 yd run
Do. on rain water pipe	10d	1/6	2/2 yd run

Do. on do. gutter	1/3	2/8	3/7 do.
Do. on small pipe	3d	6d	10d do.

## GLAZING (to New Work)

Polished Plate Glass ordinary substance (about 1in), glazing quality, in the following sizes, glazed complete—Per ft super	2ft
in plates not exceeding 2ft super in each	7/2
Do. 5ft	8/3
Do. (unless extra sizes) 45ft	9/7
Do. (unless extra sizes) 100ft	10/2

*Add extra price for glazing with screw beads or clips 5d per ft super. Do. if glazing bedded in washleather or velvet 9d per ft run.*

## SHEET GLASS, glazed, complete, per ft super, in new work:

	Ordinary quality clear, glazed to wood with putty:—
24oz as described	1/10
26oz	1/10
32oz	2/3
1/2 figured rolled, glazed to wood with putty	1/10
Group 1	Group 2
Do. in standard tints	do.
No. 1 Fluted, glazed do.	do.
1/2in Reeded (narrow, broad, etc.)	do.
Reedlyte	do.
Spotlyte	do.
1in Rough cast do.	do.
1in wired do.	do.
1in Georgian Rough Cast do.	do.
<i>Add for glazing all as before but to steel to similar work as above, 1/2d per superficial ft.</i>	

## PAINTER AND DECORATOR

## DISTEMPERING—In common colours, put on with brushes—

## ON PREPARED SURFACE

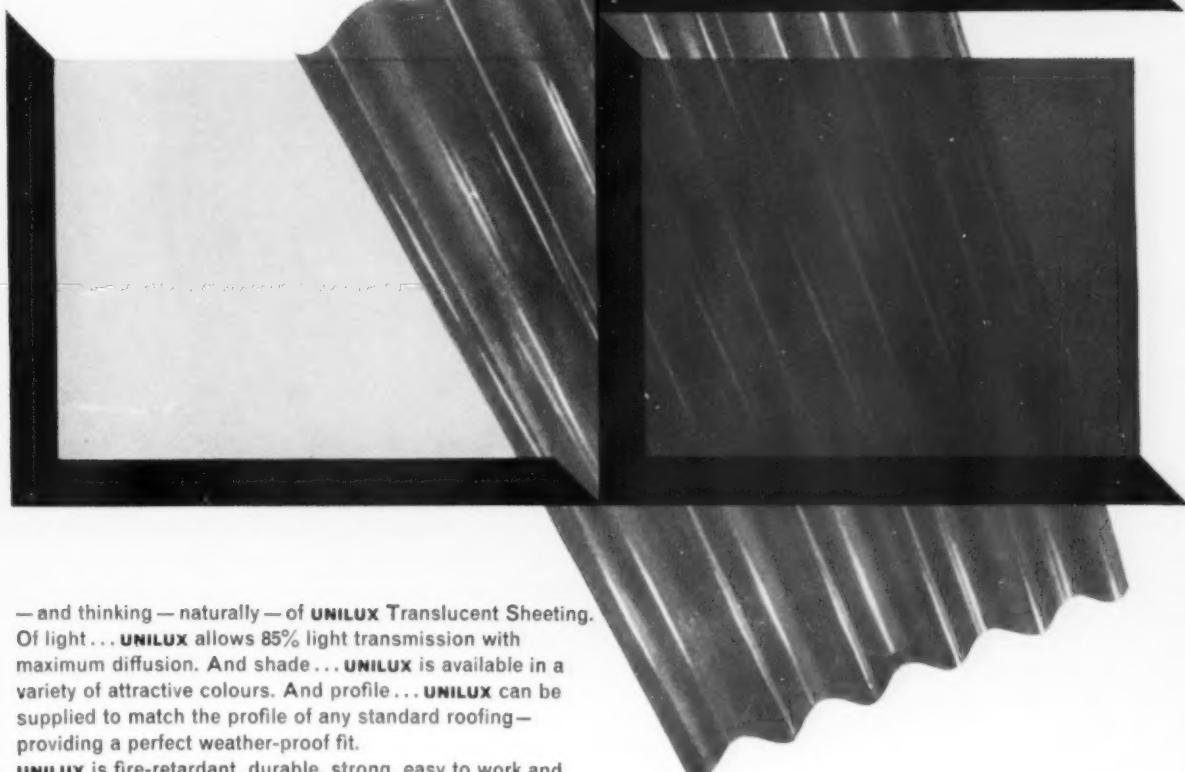
	1 coat	2 coats	Add if required
per yd super—	(finish)	(under-coat and finish)	Sealing Stippling
Ordinary distemper on flat surface of plaster	10d	1/6	6d
Washable do. on do. of plaster	1/—	1/10	6d
Add if in margins, narrow widths or panels	30%	30%	20%
Add if on mouldings	50%	50%	45%
Add if on enrichments	160%	160%	115%

## PAPERHANGING

## Hanging only—

	Per Piece	Lining Pattern
On walls	7/6	9/-
On stairs	10/3	12/-
On ceilings	9/-	10/6

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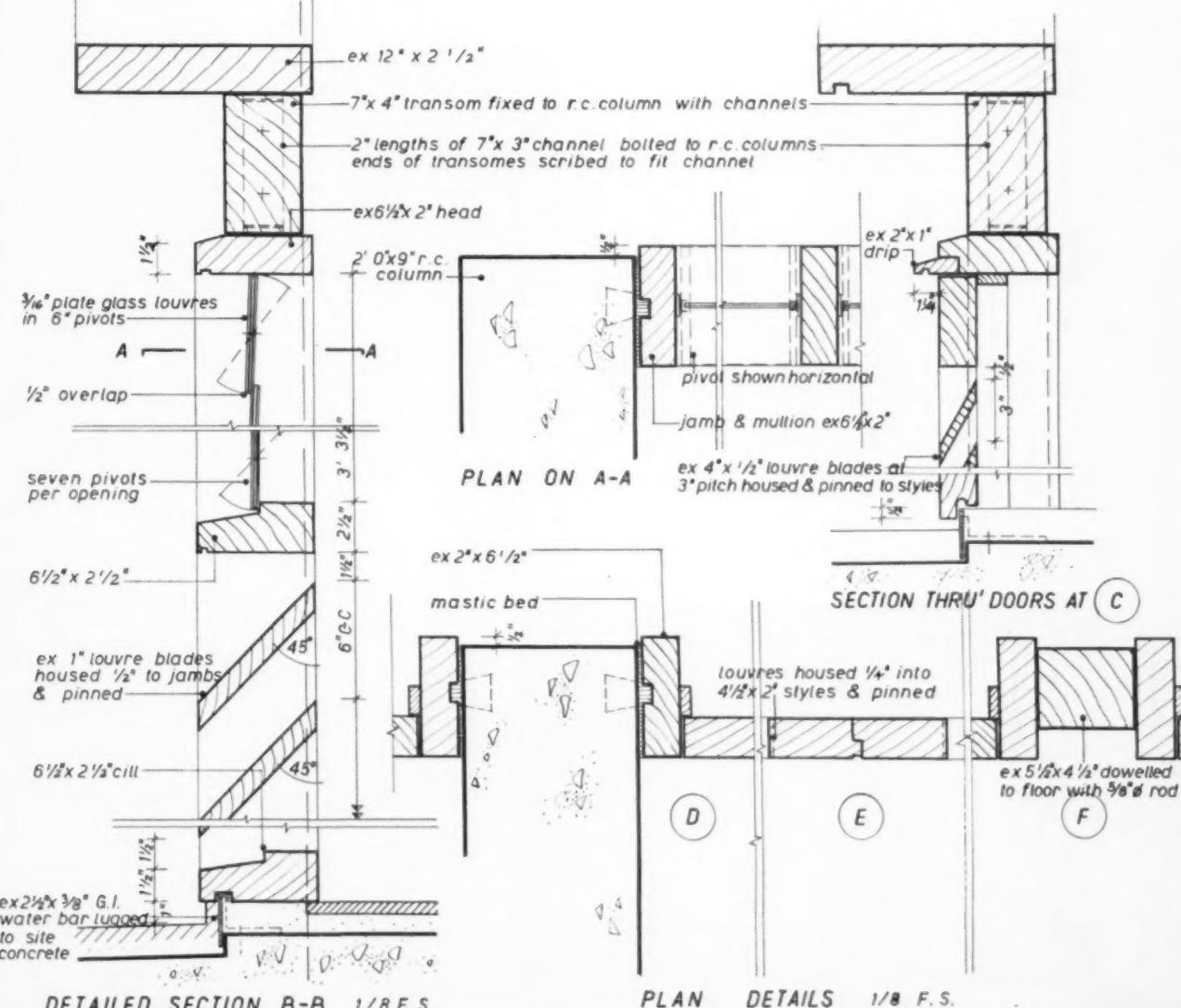
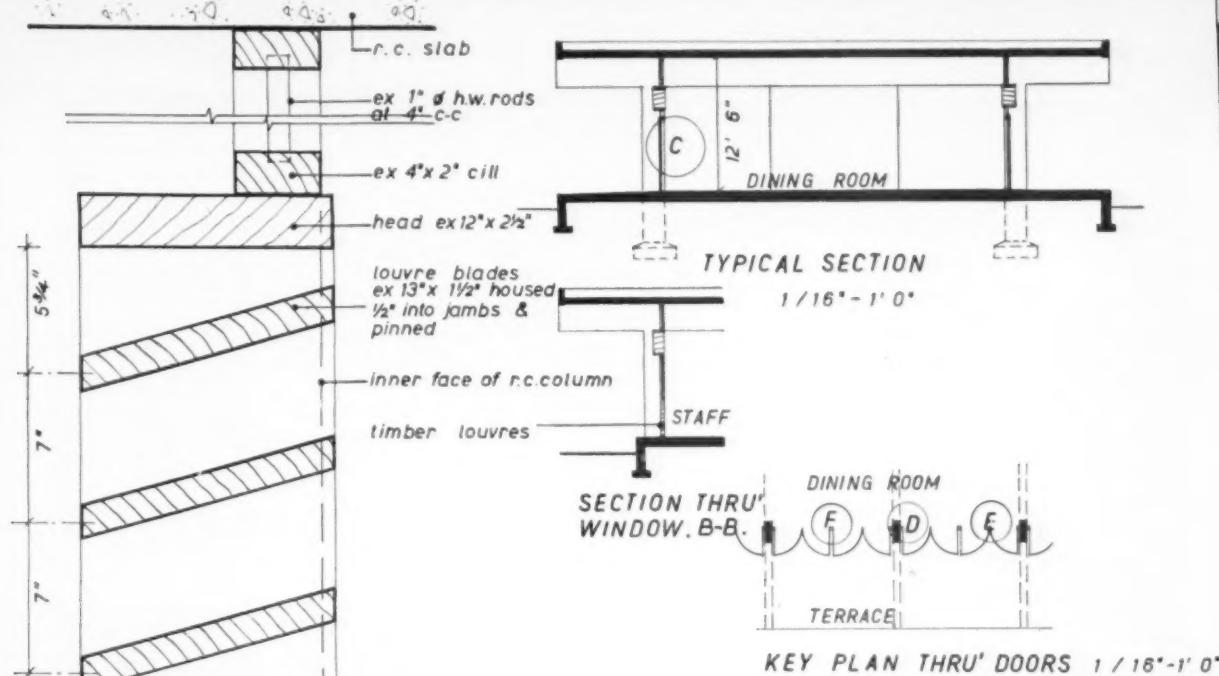


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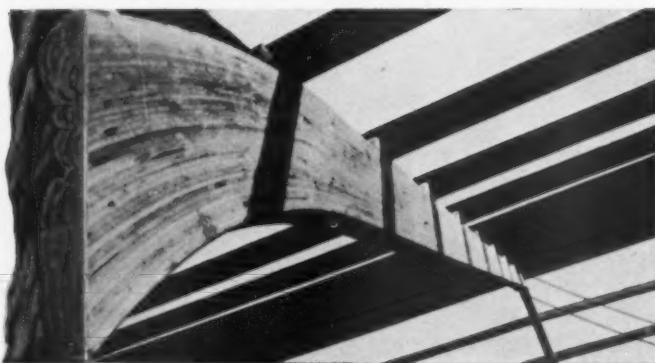
DOOR AND WINDOW DETAILS, STUDENTS' HOSTEL, TRINIDAD



The problems of permitting maximum cross ventilation and excluding glare without diminishing light values too far have been solved in a most interesting manner in the dining room to this Students' Hostel in Trinidad. Where the eaves overhang cuts off the view of the sky, close spaced vertical rods ensure maximum ventilation. Below these, low pitched louvres prevent the sky being visible, and the louvre blades, painted white, diffuse and filter the light. The doors are fitted with close-spaced louvres or pivoted glass louvres and can be shut against the rain. The apron to the dining room is in light coloured terrazzo and the concrete is untreated after the removal of the shuttering. Woodwork is painted white. Architects : Richard Llewelyn Davies and John Weeks of the Nuffield Foundation Division of Architectural Studies

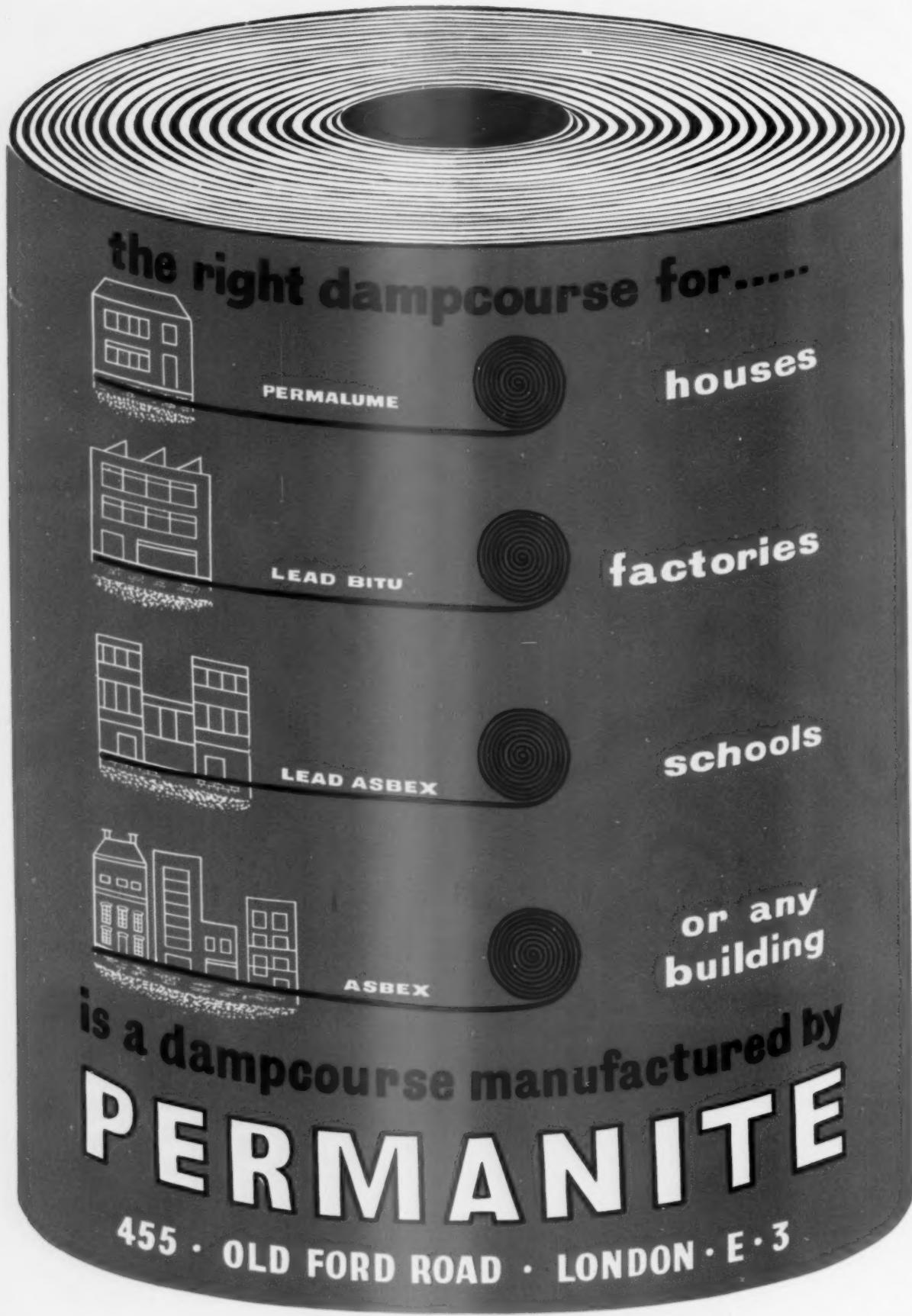
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# Contract News

## WORK IN PROSPECT

**Banbridge, Co. Down.** The U.D.C. are to demolish 300 houses and erect 400 new ones on the cleared site.

**Bermondsey B.C.** Butlers Wharf Ltd. are to erect two warehouses in Shad Thames.

**Bucks C.C.** The county planning committee has approved an application from Beaconsfield U.D.C. for 70 houses, flats and maisonettes, together with 70 garages.

**Carrickfergus, Co. Antrim.** The education committee is to erect a grammar school. For details apply to Ferris, Craig & Moore, 41 University Road, Belfast.

**Chelsea Corporation.** The planning and amenities committee has agreed to the L.C.C.'s outline proposal to erect a home for 240 very infirm old people, 45 old people's flatlets and housing for 140 people on the King's Mead site.

**Dewsbury Corporation.** The housing and town planning committee has granted planning permission for a seven-storey shop and office block in Wakefield Road.

**Essex C.C.** The children's committee has approved a scheme for two staff houses at Chafford School. Tenders are to be invited. Estimated cost £5,250.

The education committee has approved sketch plans for (1) Aveley Love Lane County Secondary School, estimated cost £197,472; (2) seven temporary classrooms with lavatories and cloak space at Canvey Island County Secondary School, estimated cost £13,500; (3) a science laboratory and preparation room at Chelmsford Moulsham County Secondary Boys' School, estimated cost £4,850; (4) kitchen for 350 meals and a further education office and stores at Warren County Secondary School, Dagenham, building cost £3,000; (5) lavatory accommodation and staff room at Dunton County Primary School, cost £5,600; (6) four additional temporary classrooms, etc., at Hare Street County Junior School, Harlow, estimated cost £12,694; (7) erection of Harlow Little Pardon No. 4 County Primary School, estimated cost £47,432; (8) science block at Mark Hill County Secondary School, Harlow, estimated cost £9,782; (9) two temporary classrooms at Tany's Dell County Junior School, Harlow, cost £4,540; (10) two temporary classrooms at Spinney County Junior School, Harlow, cost £4,450; (11) remodelling including new classroom at Rickling C. of E. (Controlled) Primary School, estimated cost £13,484; (12) erection of Stanford-le-Hope North County Junior and Infants' Schools,



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estimated cost £96,558; (13) five temporary classrooms, lavatories, cloakrooms, games store and potting shed at The King John County Secondary School, Thundersley, estimated cost £10,800; (14) gymnasium, four classrooms, practical rooms and adaptations at Wanstead County High School, estimated cost £110,950; (15) completion of Epping St. John's C. of E. (Controlled) Secondary School, estimated cost £91,327.

The education committee has agreed to the managers' proposal to proceed with the remodelling of Ridgewell C. of E. (Aided) Primary School, estimated cost £12,000.

The general purposes committee has approved schemes for (1) sectional huttied accommodation at the county planning offices, Broomfield, estimated cost £2,500; (2) extensions to planning office at the area offices, Park Road, Colchester, cost £1,700; (3) extension to offices at northwest area offices, Braintree, cost £5,000; (4) pre-fabricated building behind the welfare offices, Springfield Road, Chelmsford, cost £2,850; (5) sports pavilion at Writtle, estimated cost £6,560.

The welfare committee has approved a scheme for a home for 62 people plus staff in Bevan Avenue, Barking, estimated cost £64,550 plus £1,500 for levelling the site.

**Fermanagh.** The education committee is to erect a county secondary intermediate school at Florencecourt.

**Glasgow Corporation.** The planning committee has agreed to a planning application for a factory in London Road, Lanarkshire, submitted by Lanarkshire C.C.

**Hampstead B.C.** has approved planning applications for (1) conversion of No. 157 King Henry's Road and (2) No. 48 Goldhurst Terrace both into four flats; (3) block of flats, houses and lock-up garages in St. John's Wood Park; (4) outline application for five-storey hostel in Fitzjohn's Avenue.

**Isle of Ely C.C.** The education committee is to engage architects for (1) buildings for Tydd St. Giles School; (2) remodelling and extension at March High School.

**Leicestershire C.C.** The education committee has approved schemes for (1) conversion of the former school house into classrooms at Waltham-on-the-Wolds C. of E. (Controlled) School, estimated cost £2,000; (2) provision of sanitary accommodation at (a) Cossington C. of E. (Controlled) School, cost £1,700; (b) Blackfordby C. of E. (Controlled) School, cost £1,800; (c) Packington C. of E. (Controlled) School, cost £1,700; (3) adaptations to existing buildings to provide teaching accommodation at Loughborough College School, estimated cost £2,250; (4) adaptations to existing buildings at Market Harborough Grammar School, estimated cost £4,500; (5) erection of a caretaker's house at Castle Rock Secondary School, Coalville, estimated cost £2,250.

The fire brigade committee has approved a scheme for two additional bays at the brigade workshops at Hinckley Fire Station, total estimated cost £7,000.

**Manchester C.C.** The housing committee (1) is to build 12 A.2 type maisonettes in the Bradford Road

redevelopment area, estimated cost £22,361; (2) has approved a scheme for the erection of 275 dwellings in three 13-storey blocks, one 11-storey block and one 16-storey block in St. George's Hulme redevelopment area, estimated cost £700,967.

**The Metropolitan Water Board.** Tenders are to be invited for the erection of three flats, etc., at Camden Hill Reservoir, Kensington.

**Middlesex C.C.** The health committee is to seek the Ministry of Health's approval for (1) a central clinic at Plevna Road, Edmonton, estimated cost £45,800; (2) clinic at Church Street/Ridge Avenue, Edmonton, cost between £12,000 and £15,000; (3) clinic at Colney Hatch Lane/Sutton Road, Friern Barnet, cost £15,000; (4) extensions to clinic behind Hornsey Town Hall, cost £6,000; (5) special training school at Oakleigh Road North, Friern Barnet for mental health purposes, estimated cost £41,250; (6) an adult training centre at Acton Lodge, Isleworth, estimated cost £35,000; (7) proposal for residential accommodation at "Moorcroft" in conjunction with special training school, cost £11,450.

**Newcastle, Co. Down.** Erection of a primary school. Architects: Smith & Cowser, 31 College Gardens, Belfast.

**Newry R.D.C.** is to erect 12 houses at Carrickbracken. For details apply to Boyle & McElhinney, Ulster Bank Chambers, Newry, Northern Ireland.

**Northamptonshire C.C.** The health committee has approved plans submitted by the county architect for the erection of a health clinic in Woburn Place, Rectory Road, Rushden, estimated cost £25,700.

**Paddington B.C.** has agreed to (1) the erection of (a) flats and car park in Westbourne Grove; (b) block of 19 flats in Palace Court and Chapel Side; (c) hotel in Lancaster Gate, Bayswater Road and Elms Mews; (2) six-storey block of 36 flats, a four-storey block of 10 flats and four ancillary blocks of pram stores; (3) conversion of No. 16 Connaught Mews, W.2, into eight self-contained flats.

### SUBMISSIONS FOR PLANNING AND BYE-LAW APPROVAL

**Eccles Corporation.** Plans submitted for (1) engineers' store and offices at Enterprise Works, Clifford Street for Regent Tyre & Rubber Co. Ltd., 207-213 Oxford Street, London, W.1; (2) showroom and warehouse at Liverpool Road for the Exors. of Joseph Toft Ltd., submitted by Francis Jones & Son, 178 Oxford Road, Manchester 13; (3) furniture showroom in Church Street for W. Fryer & Sons Ltd., submitted by Scherrer & Hicks, 60 Spring Gardens, Manchester 2; (4) social club in Wellington Road for the British Transport Commission, Euston Station, London, N.W.1, submitted by Mr. A. N. Butland; (5) three classrooms at Eccles Grammar School and four classrooms at Ellesmere Park County Secondary School for the county architect, Lancs.

C.C.; (6) reconstruction of a building in Green Lane as vehicle repair shop for Joseph Chapman & Son (Patricroft) Ltd.; (7) detailed plans for a school clinic and child welfare centre in Corporation Road/Barton Lane for Lancs. C.C.

**Glasgow Corporation.** Plans submitted for (1) extension comprising three buildings in Polmadie Road for British Oxygen Gases Ltd.; (2) church hall in Beaconsfield Road for St. John's-Renfield Church; (3) single-storey works and office building at Toor Street/Finlas Street for John S. Burns & Sons; (4) block of seven-storey offices, showrooms, stores and workshops in Cadogan Street for The Factory & Commercial Holdings Ltd.; (5) six six-storey and four three-storey blocks of flats, single-storey suites of one-unit garages and two electricity sub-stations in Great Western Road for Mactaggart & Mickel Ltd.; (6) single-storey extension to the Royal Samaritan Hospital for Women, Coplaw Street, submitted by the deputy secretary Western Regional Hospital Board, 64 West Regent Street, C.2; (7) primary school and janitor's house in North Street/Perth Street for the education committee; (8) extension of Our Lady and St. Francis Secondary School, Charlotte Street/Greendyke Street for the education committee; (9) secondary school and two houses for janitors in Lochend Road, Easterhouse for education committee; (10) 233 dwellings in three 20-storey blocks at Dougrie Road for the housing committee.

**Greenwich B.C.** Plans submitted for (1) factory for light industrial use in Eastmoor Street/Mirfield Street; (2) 900-ton maize silo at Tunnel Glucose Refineries Ltd., Tunnel Avenue; (3) five-storey block of 60 one-bedroom flats in Vanbrugh Park; (4) outline application to demolish existing buildings and erect a bakery between Deptford Bridge and Deptford Church Street.

**Manchester C.C.** Plans submitted for (1) primary school at Clare Road and Errwood Crescent, Levenshulme; (2) poultry processing factory at Collingham Street; (3) extensions to St. Vincent de Paul R.C. primary school, Greenside Street and Vincent Street, Openshaw; (4) extension to factories in Lightbowne Road, Moston and Liverpool Road, Manchester 3; (5) petrol filling and service station at Fairfield Street and St. Andrew's Street, Manchester 1; (6) alterations and extensions to students' hostel, Dalton Hall, Conyngham Road, Victoria Park; (7) evangelical church hall at Wendover Road, Brooklands; (8) extensions to office accommodation at Wylex Works, Sharston Road and Longley Lane, Northenden; (9) petrol service station in Ashton New Road, Clayton; (10) block of 35 flats in Highfield House, Dene Road, Didsbury; (11) reconstruction of platform No. 3 at Oxford Road Station, Wakefield Street; (12) factory and warehouse in Stocks Street and Knowsley Street, Cheetham; (13) motor car showrooms in Ashton Old Road, Openshaw; (14) office blocks in Upper Brook Street, Chorlton on Medlock, Higher Ardwick and Dolphin Street; (15) rebuilding shops in Bury New Road, Manchester 8; (16) car showrooms and workshop to petrol filling and service station in Grey Mare Lane and Gill Street, Bradford; (17) petrol filling and service station in Princess Road/Nell Lane, West Didsbury; (18) seven-storey showroom and office block with garages and basement

car park in Peter Street, and on the corner of Port Street, Hilton Street and Tariff Street; (19) petrol service station in Palatine Road, Didsbury; (20) steel storage warehouse at Railway Sidings, Ashton Old Road; (21) amended layout for 72 flats and 56 garages at Barlow Moor Court and Fielden Road; (22) revised plan for petrol filling and service station in Altrincham Road.

**Penrith U.D.C.** Plans submitted for (1) 38 dwellings at Barco Avenue for M. Lightburn; (2) 24 dwellings at Friars Road and 12 one-unit garages for the U.D.C.

**Peterborough Corporation.** Plans submitted for (1) 26 one-unit garages in Churchfield Road for Mrs. F. Goodacre; (2) offices and workshops at Mayor's Walk for British Transport Commission; (3) storage and workshop buildings at Chapel Street for Diesel Equipment Ltd.; (4) seven pairs of semi-detached houses and garages near Manor Farm, Longthorpe for Milton Estates Co.; (5) four detached houses and garages in Ledbury Road for Netherton Building & Construction Co. Ltd.

**Portsmouth C.C.** Plans submitted for (1) first floor offices in Burfords Road for The Metal Box Co. Ltd.; (2) internal alterations at the airport for De Havilland Aircraft Co. Ltd., and factory in Middle Street for J. Cockerill & Son Ltd.; (3) old people's home in Glasgow Road for Portsmouth & District Friendly Societies; (4) block of six flats and 25 one-unit garages in Copnor Road for The Portsmouth, Gosport and District Builders' Guild Ltd.; (5) first floor extension to canteen at Rudmore Place for Portsmouth Steel Co. Ltd.; (6) booking office, restaurant, snack bar and conveniences at Broad Street for the Corporation; (7) office extension in Northern Road for Portsmouth Hardware Co.; (8) amendment to Fermenting Tower at Admiralty Road for Brickwoods Ltd.; (9) new factory at Fitzherbert Road for G. Hall & Co. Ltd.

**Reading Corporation.** Outline plan submitted for 56 flats in four-storey blocks and 56 garages in Bath Road for Sir Lindsay Parkinson & Co. Ltd.

**Scarborough Corporation.** Plans submitted for (1) showroom and factory in St. Sepulchre Street for G. Wigglesworth; (2) conversion of No. 48 Esplanade into four flats, E. W. Grey for G. F. Hill; (3) additions to Convent at St. Thomas

Street, W. S. Gray for Convent of the Ladies of Mary; (4) block of four flats in Queen Margaret's Road, G. W. Alderson for Broadland Properties Ltd.; (5) petrol filling station at St. Thomas Street, Wilkinson, Smith & Brittlebank for County Garages Ltd.

**South Shields Corporation.** Plans submitted for (1) two factories in Maxwell Street for printing purposes, Atcost Ltd., for Murray Hearne Ltd. and A. I. Surtees Ltd.; (2) two-storey shops on site of "Picture House" cinema, Ocean Road, Mr. H. Luder for E. Alex. Colman Group; (3) extension to offices at Wapping Street, T. A. Page, Son & Hill for Brigham & Cowan Ltd.; (4) extension to factory in Commercial Road, Messrs. Cotton, Ballard & Blow for S. Newman Ltd.

**Stoke Newington B.C.** Plans submitted for (1) four-storey block of flats and four garages in Lordship Road, and demolition of 192 Lordship Road and erection of a four-storey block of 12 one-room flats, submitted by Messrs. Ord, Carmell & Kitzler; (2) block of 160 one-room flats in Seven Sisters Road for Mr. J. Keable; (3) flats and garages in Manor Road and flats in Sandbrook Road, submitted by Howes & Jackman for the B.C.

**Surbiton Corporation.** Plans submitted for (1) roof over car park at Andre Rubber Co. Ltd., factory, Hook Rise; (2) storage building at J. L. Jameson Ltd. factory, Cox Lane; (3) office block at Thermacoust Ltd., factory, Davis Road and J. Harris & Son, factory, Cox Lane; (4) 12 flats and garages at Berrylands, 15 flats and 16 garages in Portsmouth Road, 18 flats in Oak Hill Road, nine flats and garages at Nos. 7 and 16 Lovelace Road, 18 flats and garages in Kingsdowne Road, six old people's dwelling units in garden and conversion of Warwick Lodge, Berrylands Road into seven flats; (5) extensions to United Dairies Milk Depot in Villiers Avenue; (6) construction of road and 26 houses in Hook Road.

**Wakefield Corporation.** Plans submitted for (1) use of two sites in Hodgson Street for a block of flats or maisonettes, Catterall, Pell & Moxon for M. J. R. Morton; (2) three pairs of semi-detached houses at Bective Road, Kay, Hartley & Waite for Harrap Bros. (Sirdar Wools) Ltd.; (3) alterations to Savoy Cinema, Horbury Road, Broadhead & Sons (W'd) Ltd., for District Cinemas Ltd.; (4) office extension to Warrentage for North Eastern Gas Board; (5) office block at St. John's North, Firth, Son & Blackburn for Charles Roberts & Co. Ltd.; (6) conversion of No. 9 St. John's Square into seven flats and four garages for Messrs. Elvey, Steel & Brooke.

**Watford Corporation.** Plans submitted for (1) 18 one-unit garages in St. Albans Road for Mrs. A. Wheeler; (2) three-storey block of nine flats with garages and eight/nine shops with eight flats over and 17 garages on Leavesden Green Estate for Rice Bros. (Builders) Ltd.; (3) hall and premises for Darby and Joan Club at Clarendon Road for the Watford & District Old Peoples' Welfare Association; (4) cable section building, brick chimney stack and vehicle repair shop at Colne Way for Brookside Metal Co. Ltd.; (5) water cooling tower at Orchard Works, High Road, Leavesden for Barr, Mason Ltd.; (6) factory and office accommodation on Holywell Estate for A. A. Polishers & Platers; (7) additional storage building in connection with the factory at Imperial Way for Intrama Ltd.; (8) construction of first floor offices over existing ground floor at Cow Lane, for Samuel Lee Bapty Ltd.; (10) extensions to existing factory off Chalk Hill for Mark Anthony & Sons; (11) four pairs of semi-detached houses at Biddenham Turn off First Avenue, for A. & L. Wilkins; (12) flatted factory on the Holywell Estate for the Corporation; (13) rebuilding as an office block 32 High Street, for Mandley & Sparrow; (14) two maisonettes and two garages in Aldenham Road for Rollis Ltd.

**Wood Green B.C.** (1) installation of new shopfront and internal alterations at 9-11 High Road, Economic Shopfitters Ltd., for Brent Bros. Ltd.; (2) internal alterations and erection of new fan house on roof of No. 48 High Road, for F. W. Woolworth & Co. Ltd.; (3) mineral water bottling factory at South's Potteries, White Hart Lane, Frank Durrant Westmore & Reeves for D.M.W.S. Ltd., and Samuel South & Sons Ltd.; (4) 14 one-unit garages in Alexandra Road for Friern Barnet U.D.C.



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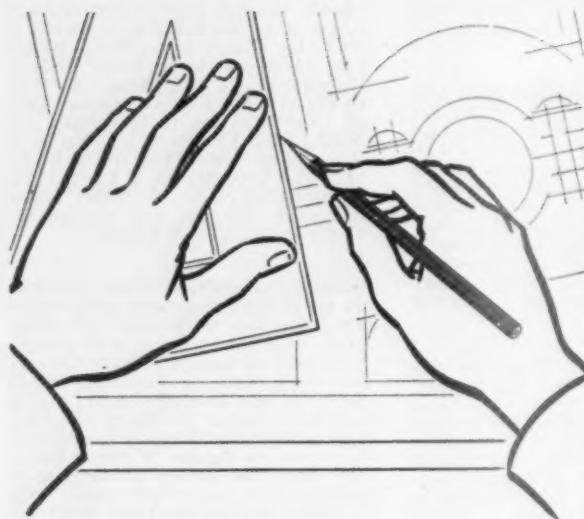
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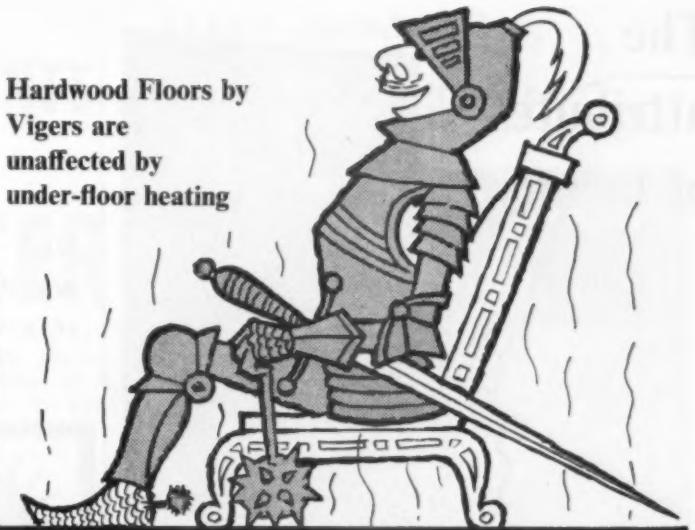
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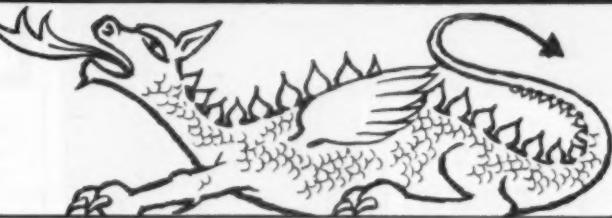
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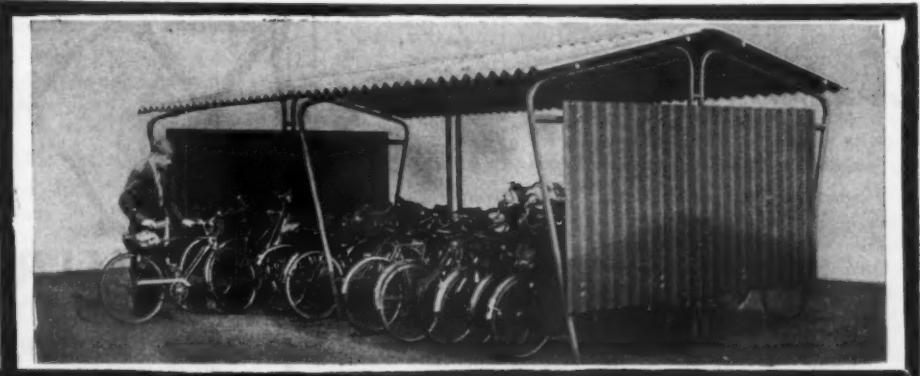
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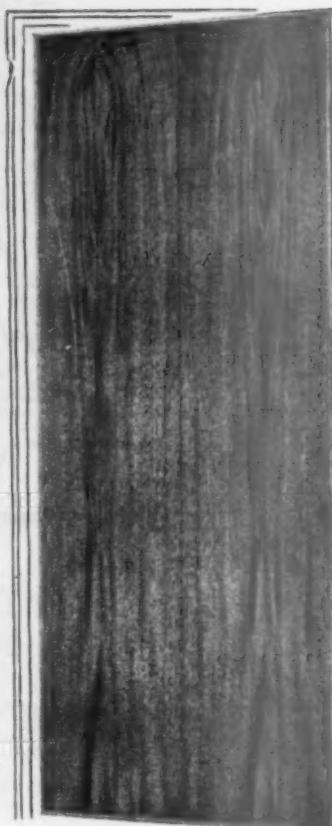
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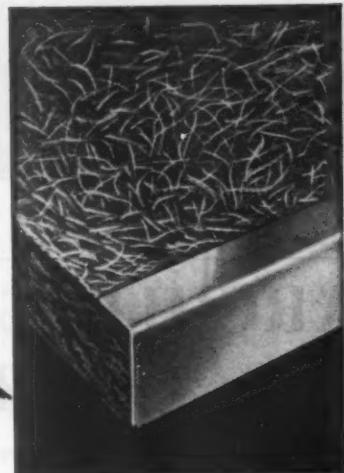
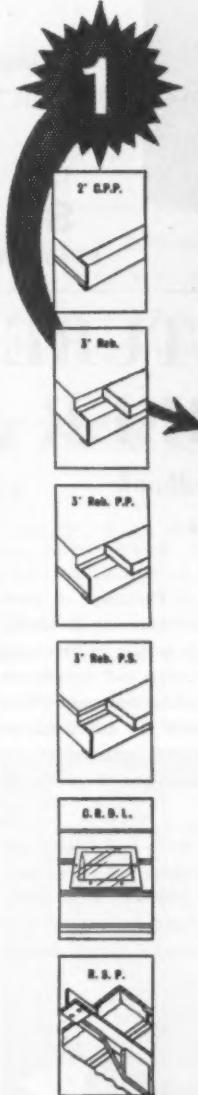
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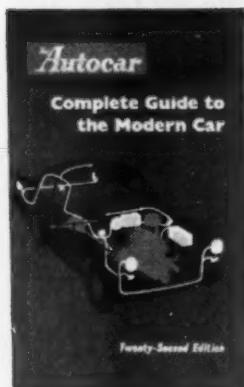
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## APPOINTMENTS CONTRACTS TENDERS

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### APPOINTMENTS

#### The University of Manchester

APPLICATIONS are invited for the post of **LECTURER IN ARCHITECTURE** from candidates with professional membership of the Royal Institute of British Architects and not less than three years of practical experience. Salary on scale (at present under review) £900 to £1,650 per annum; initial salary according to qualifications and experience. Membership of the F.S.S.U. and Children's Allowance Scheme. Applications should be sent not later than June 25, 1960, to the Registrar, the University, Manchester 13, from whom further particulars and forms of application may be obtained. [6576]

#### ARCHITECTS AND ASSISTANTS

REQUIRED in an expanding firm of London Estate Developers with interests throughout the country. Top salaries offered with good prospects of advancement. Pension Scheme. Applicants must be keenly interested in contemporary design with a sound knowledge of construction in housing, flat, shop and office projects. Write details of experience, present salary, etc., to the Chief Architect, Box No. 0207. [6597]

#### Bracknell Development Corporation

APPLICATIONS are invited for the following vacancies in the Chief Architect's Department:—

(1) **Architect**, salary range £1,065-£1,220.  
(2) **Architectural Assistant**, salary range £610-£765.

(3) **Junior Architectural Assistant**, salary up to £595 (commencing salary according to qualifications and experience).

Superannuation schemes, medical examinations. Housing available. Apply by June 22, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks, stating clearly which post is applied for. [6603]

#### Hampshire County Council

**COUNTY ARCHITECT**, commencing salary within the scale £3,745 by £135 to £4,150.

Candidates must be Associates or Fellows of the R.I.B.A. The successful candidate will be required to take up his duties on or about December 12, 1960, and will be prohibited from engaging in private practice. Separation allowance and assistance with removal expenses in approved cases.

Applications stating age, education, past and present appointments, experience, and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by June 30. [6601]

**BUILDERS' QUANTITIES**, covering basic principles of quantity surveying. Instructor required by Queen Elizabeth's Training College for the Disabled, Leatherhead, Surrey. Resident or non-resident. Pension scheme and good prospects. Apply fully in writing to the Principal. [6607]

**WAR DEPARTMENT** requires Temporary Model Maker in the Directorate of Works, War Office, Chessington, Surrey, which is engaged on a wide variety of building projects at home and abroad. Applicants should be able to interpret sketches and working drawings and prepare preliminary and presentation models using various media such as paper, wood and perspex, and should have a good sense of texture and colour. Salary £700 x £25 to £750 p.a. (National) plus London Weighting addition of £20-£22 p.a. Application stating age and full details of training and experience should be forwarded to: Directorate of Works, The War Office (WDA2(c)), Chessington, Surrey, or any Employment Exchange quoting Westminster 2267. [6615]

#### Lanark County Council

**ARCHITECTURAL ASSISTANTS** (qualified A.R.I.B.A.) required for County Architect's Department with headquarters at Motherwell, on the following J.I.C. salary scales—Admin. "D" (1,040-£1,120); Professional Assistant (£795-£1,075). Placing on both scales may be given according to qualifications and experience. Employment offers wide scope in development of modern building programme. Medical examination. Superannuation. No canvassing. Applications stating age, qualifications and experience, together with names and addresses of three referees, should be lodged with County Clerk, P.O. Box No. 1, Glasgow, within 14 days of advertisement. [6610]

#### London County Council

**ARCHITECTS** (up to £1,135) (under review) required for Housing, Schools, General and Special Works Divisions. Full and varied programme of new work including schools, multi-storey flats and Town Development. Starting salaries according to qualifications and experience.

Particulars and application form from Hubert Bennett, F.R.I.B.A., Architect to Council (E.K./ABN/496/6), County Hall, S.E.1. [6616]

#### Navy, Army and Air Force Institutes

EXTENSIVE commitments both at home and overseas necessitate the additional services of the following experienced staff based on our London Headquarters.

#### CLERK OF WORKS/WORKS SUPERINTENDENT

#### ARCHITECTURAL ASSISTANTS DRAUGHTSMEN AND TRACERS

#### TRAINEES

Young men under 21 years with an inclination towards professional work associated with buildings and prepared to supplement training with a course of study are also required on:—

#### QUANTITY SURVEYING and as

#### ARCHITECTURAL ASSISTANTS DRAUGHTSMEN & TRACERS

Applications giving details of age, experience, etc., to Controller, Works & Buildings (A), N.A.A.F.I., Imperial Court, Kennington, S.E.11. [6613]

#### City and County of Newcastle upon Tyne

City Architect's Department CONSEQUENT upon revisions to the Establishment of his Department, the City Architect is now able to offer vacancies in a number of additional senior posts in the Department, and will be pleased to hear from Architects who are keen to take part in an exciting and extensive programme of high-quality architectural work.

**Principal Assistant Architects** (three) (General, Education and Re-Housing Sections), J.N.C. "C" (£1,385-£1,620 per annum).

**Principal Assistant Architect** (one) (Housing Section), J.N.C. "B" (£1,255-£1,485 per annum).

**Senior Assistant Architects** (all Sections), A.P.T. V (£1,220-£1,375 per annum).

**Senior Assistant Architects** (General, New Town Hall and Housing Sections), A.P.T. IV (£1,065-£1,220 per annum).

**Senior Assistant Architects** (Housing and Re-Housing Sections), A.P.T. III (£880-£1,065 per annum).

**Assistant Architect** (Re-Housing Section), A.P.T. II (£765-£880 per annum).

**Architectural Assistants** (Education and Re-Housing Sections), A.P.T. I (£610-£765 per annum).

Work has now commenced on the superstructure of the New Town Hall and there are interesting schemes in preparation for Colleges of Further Education, Multi-Storey Flats and other building works of a major nature. There is, too, the prospect of stimulating work in the near future on redevelopment of the City Centre.

Further details of the above posts and forms of application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne 1. Applicants must state the Section of the Department and the post and grade applied for when requesting particulars. Closing date for completed applications: Thursday, June 30, 1960.

JOHN ATKINSON,

Town Clerk.

Town Hall,  
Newcastle upon Tyne 1.

May 27, 1960.

[6606]

#### The Royal Technical College of East Africa and Proposed University College in Nairobi

APPLICATIONS are invited for **SENIOR LECTURESHIP IN QUANTITY SURVEYING**. Salary scale: £1,760 x £72 to £2,120 p.a., entry point determined by qualifications and experience. Responsibility allowance £100 p.a. for headship of department. Superannuation. Child allowance £50 p.a. per child (max. £150 p.a.). Passages for appointee and family (up to four adult passages) on appointment, termination and leave (once every two years). Rent according to quarters provided £60-£114 p.a. Detailed applications (eight copies) naming three referees by July 25, 1960, to Secretary, Inter-University Council for Higher Education Overseas, 29 Woburn Square, London, W.C.1, from whom further particulars may be obtained.

[6612]

## Official Announcements

### APPOINTMENTS (cont)

#### Cannock Urban District Council

**SENIOR ASSISTANT ARCHITECT**  
APPLICATIONS are invited for this appointment in the Architect's Department of the Council at a salary within Grade A.P.T. IV (£1,065 per annum to £1,220 per annum).

Housing accommodation available, if married.

Further particulars may be obtained from the undersigned to whom applications should be submitted by Monday, June 20, 1960.

The area of the Authority is not affected by proposals of the Local Government Commission.

H. C. ALLEN,  
Clerk of the Council.

Council House,  
The Green,  
Cannock,  
Staffs.  
May, 1960.

[6614]

#### Bracknell Development Corporation

APPLICATIONS are invited for the post of **ARCHITECT**, salary range £1,163-£1,390. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination. Housing available. Apply by June 20, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. [6588]

#### ARCHITECTURAL ASSISTANTS INTERMEDIATE OR FINALS STANDARD

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[0830]

### ARCHITECTURAL APPOINTMENTS VACANT

**ARCHITECTURAL ASSISTANT** required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20 Bedford Square, London, W.C.1. [0916]

**ARCHITECTURAL ASSISTANT**, London, Final standard. Industrial and commercial. Progressive and interesting. Salary according to experience and ability. Box 3667. [0079]

**ARCHITECTURAL ASSISTANTS**, Senior and Junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Write Box 7936. [0690]

**DEVEREUX & DAVIES** require capable and enthusiastic assistant architects, salary £1,000 per annum or according to experience and ability.—Devereux & Davies, 3 Gower Street, Bedford Square, London, W.C.1. [0660]

**QUALIFIED CHIEF ASSISTANT AND JUNIOR** required in one of the most delightful towns in the country. Applicants should be genuinely interested in a varied private practice, the work including schools, hospitals, banks, shops and housing. Bonus and pension schemes in operation. Salary according to ability. Excellent prospects. Apply in confidence to Messrs. F. J. Lenton & Partners, A.R.I.B.A., 16 Broad Street, Stamford, Lincs. [6609]

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[0790]

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**ARCHITECTURAL ASSISTANTS** of Final or Intermediate standard required by London architects with varied practice. Salary by arrangement. Five-day week. Ring WHI 2552 for interview. [0720]

**ARCHITECTURAL ASSISTANT**, Intermediate standard. Busy London office. Good prospects. Box 3668. [0080]

**ARCHITECTURAL** Staff required. All grades. Five-day week, first-class prospects. H. Hubbard Ford, F.R.I.B.A., 24 Cornfield Road, Eastbourne. [6527]

**BASIL SPENCE & PARTNERS** require qualified and experienced Architects to fill positions of responsibility on a major building programme. Write to 48 Queen Anne Street, W.1, stating experience and salary required. [0740]

**ARCHITECTS** required in expanding practice for assistance with hospitals, garages, hotels, banks, etc. Salaries, according to ability and experience, £750-£1,200 and bonus. Apply for an appointment to Eberlin & Partners, 3 College Street, Nottingham. [6617]

**HOWARD V. LOBB & PARTNERS** would welcome applications from Architects, either newly qualified or with some years' experience, to help on a wide variety of projects. Salaries would be between £750 and £1,250. 20 Gower Street, London, W.C.1. MUSEUM 8575. [6618]

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L. GODDARD SMALLEY,

Town Clerk.

Town Hall,  
Wokingham,  
Berks.

June 1, 1960.

[6620]

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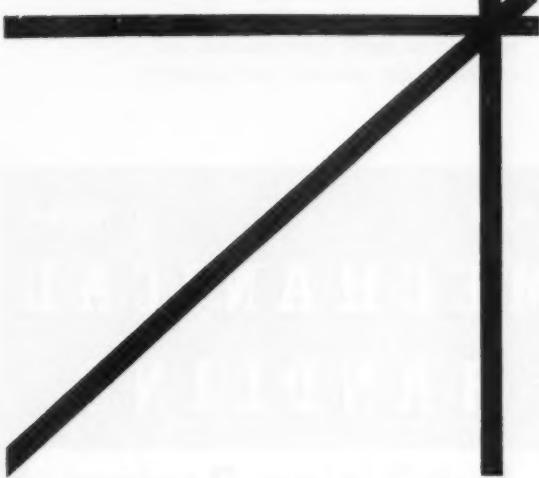
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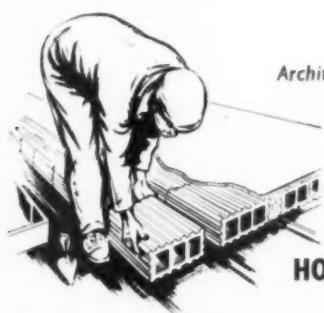
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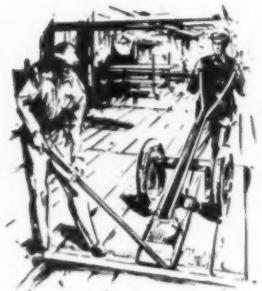
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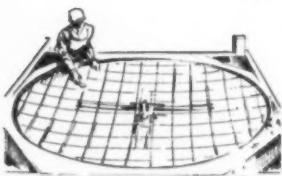
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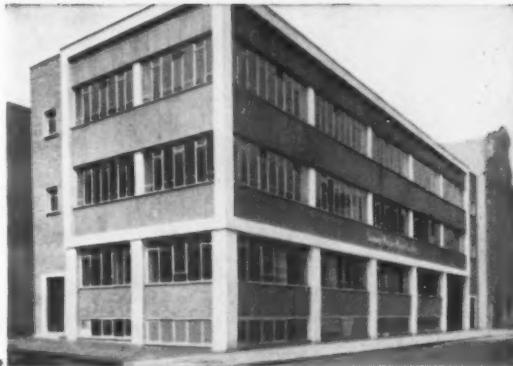
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